

COST OF MANUFACTURE OF GUNS, ETC.

L E T T E R

FROM

THE SECRETARY OF WAR,

SUBMITTING

A STATEMENT OF THE COST OF ALL TYPE AND EXPERIMENTAL
MANUFACTURE OF GUNS AND OTHER ARTICLES MANUFAC-
TURED BY THE GOVERNMENT DURING THE FISCAL YEAR
ENDED JUNE 30, 1903.

JANUARY 19, 1904.—Referred to the Committees on Appropriations and Military
Affairs and ordered to be printed.

WAR DEPARTMENT,
Washington, January 19, 1904.

SIR: I have the honor to transmit herewith a letter from the Chief
of Ordnance, United States Army, dated January 16, instant, sub-
mitting, in accordance with the requirements of the act approved
August 18, 1890, a statement of the cost of all type and experimental
manufacture of guns and other articles, and the average cost of the
several classes of guns and other articles manufactured by the Gov-
ernment during the fiscal year ended June 30, 1903.

Very respectfully,

ELIHU ROOT, *Secretary of War.*

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ORDNANCE,
Washington, January 16, 1904.

SIR: In accordance with the requirements of the act approved August
18, 1890, I have the honor to transmit herewith, for the information
of Congress, statement of the cost of all type and experimental manu-
facture of guns and other articles, and the average cost of the several
classes of guns and other articles manufactured by the Government dur-
ing the fiscal year ended June 30, 1903.

Very respectfully,

WILLIAM CROZIER,
Brigadier-General, Chief of Ordnance.

The SECRETARY OF WAR.

Annual statement of manufactures at Frankford Arsenal for the fiscal year ended June 30, 1903, with a statement appended showing the disbursements under each appropriation.

Quantity.	Article.	Price.	Amount.
CLASS III.			
2	Rear sights for 1.65-inch Hotchkiss mountain gun, fitted for percussion firing.....each..	\$12.00	\$24.00
24	Rear sights for 75-mm. Vickers-Maxim mountain gun, with additional sighting scale.....each..	38.00	912.00
4	Front sights for 3-inch Hotchkiss mountain gun, using percussion primer ammunition.....each..	5.40	21.60
2	Rear sights for 3-inch Hotchkiss mountain gun, using percussion primer ammunition.....each..	23.75	47.50
50	Front sights for 3.2-inch B. L. rifle.....do..	6.00	300.00
104	Rear sights for 3.2-inch B. L. rifle.....do..	20.00	2,080.00
6	Front sights for 3.6-inch B. L. rifle.....do..	6.00	36.00
6	Rear sights for 3.6-inch B. L. rifle.....do..	21.00	126.00
15	Front sights for 5-inch B. L. rifle.....do..	6.50	97.50
19	Rear sights for 5-inch B. L. rifle.....do..	25.00	475.00
6	Rear sights for 8-inch converted rifle.....do..	21.00	126.00
100	Gunnery quadrants, model 1898, in walnut cases.....do..	16.00	1,600.00
2	Sample elevation quadrants for 12-inch B. L. mortar.....do..	90.00	180.00
1	Experimental elevation quadrant with minute pointer, complete, for 12-inch mortar carriage, model 1896.....do..		206.00
1	Range quadrant for 3-inch field carriage, model 1902.....do..		477.00
CLASS IV.			
2,514	2.95-inch, 12½-pound, shrapnel, 75 mm., Vickers-Maxim mountain gun.....each..	2.60	6,536.40
30	3-inch, 15-pound, shrapnel, base charge.....do..	2.60	78.00
5	6-inch shrapnel, experimental.....do..	50.00	250.00
1	3-inch shrapnel, sectionalized to show construction.....do..		10.50
1	3.2-inch shrapnel, sectionalized to show construction.....do..		10.00
CLASS V.			
1,500	5.2-inch, 11½-pound, canister, "Sawyer," packed as complete rounds, 5 in a box, with propelling charges and primers.....each..	2.56	3,840.00
1,000	3.2-inch, 11½-pound, canister, "Sawyer," packed 10 in a box without propelling charges or primers.....do..	1.42	1,420.00
12	Rounds, 12½-pound, shrapnel, fixed ammunition for 75 mm., Vickers-Maxim mountain gun.....each..	4.86	58.32
160	Rounds, fixed ammunition-shell for 75 mm., Vickers-Maxim mountain gun.....each..	3.66	585.60
154,776	Rounds, 1-pounder, fixed ammunition for subcaliber firing.....do..	.82	126,916.32
10	Artillery drill cartridges, for 75 mm., mountain gun.....do..	13.26	132.60
1	Artillery drill cartridge, for 3-inch field gun, model 1902.....do..		13.61
1	Dummy cartridge for 75 mm., Vickers-Maxim mountain gun.....do..		4.00
1	Dummy cartridge for 3-inch field gun.....do..		4.00
CLASS VIII.			
190,000	Ball cartridges, caliber .30-inch, for artillery drill cartridges.....M..	25.00	4,750.00
391,500	Ball cartridges, caliber .30-inch, for U. S. magazine rifle, model 1903.....M..	30.00	11,745.00
24,454,585	Ball cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898.....M..	24.00	586,910.04
52,000	Ball cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898, special hand loaded.....M..	32.50	1,690.00
22,000	Ball cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898, special.....M..	28.00	616.00
102,000	Ball cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898, proving rifle barrels.....M..	25.00	2,550.00
20,000	Ball cartridges, caliber .30 inch, for U. S. magazine rifle, model 1903, 75,000 pounds pressure.....M..	32.70	654.00
500	Ball cartridges, caliber .30 inch, for U. S. magazine rifle, model 1903, 100,000 pounds pressure.....M..	32.70	16.35
100	Ball cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898, for pressure.....M..	34.00	3.40
539,540	Ball cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898, reduced range.....M..	21.50	11,600.11
80,000	Dummy cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898.....M..	19.50	1,560.00
5,200	Dummy cartridges, caliber .30 inch, for U. S. magazine rifle, model 1903.....M..	25.00	130.00
2,017,213	Blank cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898.....M..	17.00	34,292.62
25,480	Blank cartridges, caliber .30 inch, for Gatling gun only.....M..	18.00	458.64
3,729,159	Gallery practice cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898.....M..	16.00	59,666.54
25,000	Gallery practice cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898, cupped bullet.....M..	16.05	401.25
1,440,080	Multi-ball cartridges, caliber .30 inch, for U. S. magazine rifle, model 1898.....M..	20.00	28,801.60

Annual statement of manufactures at Frankford Arsenal, etc.—Continued.

Quantity.	Article.	Price.	Amount.
CLASS VIII—Continued.			
2, 483, 933	Rifle and carbine blank cartridges, caliber .45 inch.....M.	\$15.75	\$39, 121.94
41, 420	Rifle and carbine blank cartridges, for Gatling gun only, caliber .45 inch.....M.	19.50	807.69
53, 160	Multi-ball cartridges, for Springfield carbine, caliber .45 inch.....M.	18.75	996.75
1, 000	Revolver ball cartridges, caliber .45 inch, new primer, for Colt's revolver, double action.....M.	13.00	13.00
4, 804, 268	Revolver ball cartridges, caliber .38 inch.....M.	9.50	45, 640.55.
2, 649, 094	Revolver blank cartridges, caliber .38 inch.....M.	8.25	21, 855.03
16, 000	Bullets, caliber .30 inch.....M.	7.75	123.68
5, 000	Bullets, caliber .30 inch, "cup," gallery practice.....M.	7.79	38.90
200	Bullets, caliber .30 inch, "cup," "New Jersey".....M.	7.68	1.54
1, 048, 000	Rifle bullets, caliber .45 inch.....M.	6.10	6, 392.80
2, 000	Revolver bullets, caliber .38 inch.....M.	2.21	4.42
1, 002, 000	Round balls, caliber .45 inch.....M.	2.00	2, 004.00
4, 697, 000	Cartridge primers for small arms, black powder.....M.	1.61	7, 562.17
96, 000	Cartridge primers, H/48, smokeless powder.....M.	1.61	154.56
350, 000	Cannon friction primers, radial vents.....M.	21.60	7, 560.00
20, 000	Cannon friction primers, for radial vents, short, for Life-Saving Service.....M.	21.60	432.00
15, 940	Cannon friction primers, for subcaliber firing.....M.	45.00	717.30
7, 786	Obturator friction primers with screw thread for old model vents.....100.	23.00	1, 829.71
13, 220	Obturator friction primers, for siege cannon (model 1902).....each.	.25	3, 305.00
9, 200	Obturator electric primers, single wire and with screw thread, for old model vents.....100.	23.50	2, 162.00
18, 830	Combination electric and friction primers for seacoast cannon (model 1902).....each.	.55	10, 356.50
100	Combination electric and friction primers for seacoast cannon, with insulating cylinders.....each.	.55	55.00
110	Electric primers, special, for use in new Bethlehem 15-pounder gun.....each.	.45	49.50
100	Percussion primers for Bofors 6-inch R. F. gun.....do.	.92	92.00
60	Mercuric picrate siege fuses, 50-grain detonator, for 5-inch and 7-inch shell.....each.	1.25	75.00
25	Base percussion fuses, F, model 1902, experimental.....do.	1.37	34.25
25	Base percussion fuses, S, Model 1902, experimental.....do.	1.60	40.00
25	Base percussion fuses, 7-M, model 1902, experimental.....do.	1.70	42.50
25	Base percussion fuses, 12-M, model 1902, experimental.....do.	2.12	53.00
25	Experimental A. P. detonating fuses, thick wall pattern, 50-grain detonator, mercuric picrate filling, pointed caps.....each.	10.00	250.00
6	Experimental A. P. detonating fuses, disk construction, 300-grain detonator, dummy plunger and primer.....each.	10.00	60.00
5	Combination detonating fuses, for 5-inch and 7-inch steel shell, 50-grain detonator, experimental.....each.	4.50	22.50
5	Combination detonating fuses for 3.2-inch steel shell, experimental.....each.	4.50	22.50
3	A. P. detonating fuses, picric acid filling, 100-grain detonator, without plunger or percussion composition, experimental.....each.	6.00	18.00
3	A. P. detonating fuses, mercuric picrate filling, 100-grain detonator, without plunger or percussion composition, experimental, each.....	6.00	18.00
15	Base percussion, high C, fuses, model 1900, with special stocks.....each.	1.00	15.00
42	Experimental 20-inch combination time and percussion fuses.....do.	16.00	672.00
13	Point percussion fuses, for 1-pounder shell.....do.	.79	10.27
10	15-inch combination fuses, latest model, sectionalized.....do.	3.80	38.00
11	Base percussion fuses, "C," sectionalized.....do.	1.55	17.05
1	Base percussion fuse "F," model 1902, sectionalized.....do.		3.00
200	Propelling charges for 75-mm. Vickers-Maxim mountain gun, each.....	.58	116.00
CLASS IX.			
34	Connecting clips for electric primers, single wire.....each.	2.50	85.00
1	Tripod mount for telescopic sight for instruction purposes.....		94.00
CLASS X.			
2, 000	Revolver cartridge shells, caliber .38 inch, primed.....M.	6.50	13.00
102, 000	Rifle and carbine cartridge shells, caliber .45 inch, primed.....M.	10.00	1, 020.00
13, 500	Cartridge shells, caliber .30 inch, primed.....M.	11.94	161.19
24	Graduated sight leaves for 75-mm. Vickers-Maxim mountain gun sights.....each.	1.00	24.00
6	Graduated strips for rear sights 75-mm. Vickers-Maxim mountain gun.....each.	1.25	7.50
18	Graduated strips for 75-mm. Vickers-Maxim mountain gun carriages.....each.	1.25	22.50
3	Deflection screws for rear sight for 3.2-inch B. L. rifle.....do.	.40	1.20
6	Trunnion clamping screws for rear sight 3.2-inch B. L. rifle.....do.	.25	1.50
4	Bolts and nuts for level tubes of rear sight 3.2-inch B. L. rifle, each.....	.124	.50

Annual statement of manufactures at Frankford Arsenal, etc.—Continued.

Quantity.	Article.	Price.	Amount.
CLASS X—Continued.			
1	Graduated elevation disk and graduated pointer for elevation indicating device for 12-inch mortar carriage, model 1896.....		\$78.00
1, 100	Cartridge cases for 6-pounder R. F. gun.....each..	\$0.96	1,056.00
2, 011	Cartridge cases for 15-pounder R. F. gun.....do....	2.75	5,530.25
14, 513	Cartridge cases for 75-mm. Vickers-Maxim mountain gun.....do....	.80	11,610.40
100	Cartridge cases for 3-inch R. F. field gun, model 1902.....do....	1.15	115.00
3	Experimental cartridge cases for 4.7-inch (short) Armstrong R. F. gun.....each..	3.90	11.70
3	Experimental cartridge cases for 6-inch Armstrong R. F. gun, each.....	7.50	22.50
3	Experimental cartridge cases for saluting charges for 6-pounder R. F. gun.....each..	1.70	5.10
3	Experimental cartridge cases for saluting charges for 15-pounder R. F. gun.....each..	3.60	10.80
3	Experimental cartridge cases for saluting charges for 4.72-inch Armstrong R. F. gun.....each..	7.00	21.00
3	Experimental cartridge cases for saluting charges for 6-inch Armstrong R. F. gun.....each..	9.00	27.00
2	6-pounder cartridge cases cut to show construction.....do....	3.00	6.00
4, 800	Felt wads, for 75-mm. Vickers-Maxim mountain gun cartridge case.....M.....	20.50	98.40
150	Felt wads for 6-inch Armstrong R. F. gun cartridge case.....M.....	69.60	10.44
500	Felt wads for 4-inch Driggs-Schroeder R. F. gun cartridge case.....M.....	44.00	22.00
6, 800	Felt wads for 6-pounder R. F. gun cartridge case.....M.....	13.15	89.42
8, 400	Felt wads for 15-pounder R. F. gun cartridge case.....M.....	22.50	189.00
400	Felt wads for 6-pounder R. F. gun cartridge, short, for saluting charges.....M.....	14.15	5.66
5, 400	Felt wads for 15-pounder R. F. gun cartridge case, short, for saluting charges.....M.....	23.50	126.90
350	Felt wads for 4.72-inch Armstrong R. F. gun cartridge case, short, for saluting charges.....M.....	48.00	16.80
150	Felt wads for 6-inch Armstrong R. F. gun cartridge cases, short, for saluting charges.....M.....	70.60	10.59
150	Long 110-grain percussion cannon primers, experimental.....each..	.40	60.00
12, 340	Percussion primers for use with adapters in Armstrong R. F. gun, each.....	.45	5,553.00
1, 000	Percussion primers for 4-inch R. F. gun cartridge cases.....each..	.08	80.00
7, 040	Electric primers for use with adapters in Armstrong R. F. gun, each.....	.45	3,168.00
3, 500	Percussion primers for 75-mm. Vickers-Maxim cartridge cases, M.....	25.40	88.90
100	Cartridge bags for saluting charges for 6-pounder R. F. gun.....each..	.12	12.00
100	Cartridge bags for saluting charges for 15-pounder R. F. gun.....do....	.18	18.00
154	Cones for dummy 15-inch combination fuse.....do....	.12	18.48
122	Covers for dummy 15-inch combination fuse.....do....	.24	29.28
100	Shell tracers, "Semple," for attachment to field and siege base percussion fuses.....each..	.82 ³ / ₁₀	82.30
4	Cast-iron base plugs, with blank detonating fuse stocks, for 10-inch A. P. shell.....each..	32.10	128.40
1	Lignum-vitæ base plug, with blank detonating fuse stock, for 10-inch A. P. shell.....		31.50
4	Cast-iron base plugs, with blank detonating fuse stocks, for 8-inch A. P. shell.....each..	31.00	124.00
1	Lignum-vitæ base plug, with blank detonating fuse stock, for 8-inch A. P. shell.....		31.20
800	Ring resistance plungers for base percussion "High C" fuse, model 1900.....100..	.25	2.00
20, 000	Safety rings, for base percussion "High A" fuse.....M.....	1.63	32.60
5, 300	Brass fuse plugs, size "A".....each..	.25	1,325.00
200	Brass fuse plugs, size "AA".....do....	.25	50.00
200	Blank fuse plugs, size "F," model 1902.....100..	17.00	34.00
175	Washers or calking leads, for detonating fuses.....100..	4.00	7.00
25	"Drill primer outfits" for vents taking the combination electric and friction primer.....set..	10.50	262.50
11	"Drill primer outfits" for vents taking the obturating friction primer with screw thread.....set..	11.50	126.50
	Components of "drill primer outfits" for vents taking obturating friction primer with screw thread:		
10	Bodies.....100..	10.50	1.05
10	Rear wires.....100..	3.50	.35
300	Serrated wires with friction pellets.....100..	3.60	10.80
150	Brass closing cups.....M.....	1.27	.19
2	Assembling tools.....100..	3.50	.07
1	Disassembling tool.....		.04
1	Charger.....		.06
1	Funnel.....		.09
2	Wheel hubs and fastenings, for 3-inch field carriage.....each..	134.00	268.00

Annual statement of manufactures at Frankford Arsenal, etc.—Continued.

Quantity.	Article.	Price.	Amount.
<i>Ironmongery, etc.</i>			
5,550	Lead disks for base covers, 8-inch projectile	\$0.04 $\frac{1}{2}$	\$249.75
5,550	Lead disks for base covers, 10-inch projectile .....	.06 $\frac{3}{10}$	366.30
3,500	Screw rings for use in packing combination fuses	17.10	59.85
<i>Office.</i>			
7,000	Paper seals	1.00	7.00
1	Setback and prediction scale for 12-inch B. L. rifles		17.40
1	Setback and prediction scale for 10-inch B. L. rifles		17.40
1	Setback and prediction scale for 8-inch B. L. rifles		17.40
1	Setback and prediction scale for 12-inch B. L. mortars		17.40
2	Range scales, 40 inches long, reading 400 yards to the inch, smallest reading 20 yards		
	.....each.....	14.80	29.60
2	2-quadrant plotting boards	260.00	520.00
3	4-quadrant plotting boards	285.00	855.00
4	Zinc-faced plotting boards, 40 by 70 inches, complete	23.00	92.00
4	Zinc-faced plotting boards, 60 by 80 inches	32.70	130.80
3	Zinc-faced plotting boards, 48 by 76 inches	24.00	72.00
5	Zinc-faced plotting boards, 18 by 24 inches	10.00	50.00
3	Semicircular plotting boards, with a radius of 42 inches, not zinc faced	24.35	73.05
3	Sets scale arms, 40 inches long, graduated 300 yards to the inch, for use with plotting boards	17.20	51.60
2	Sets scale arms, 80 inches long, graduated 500 yards to the inch, for use with plotting boards	40.00	80.00
1	Set scale arms, 80 inches long, graduated 100 yards to the inch, for use with plotting boards	40.00	40.00
5	Sets scale arms, 30 inches long, graduated 500 yards to the inch, for use with plotting boards	15.00	75.00
2	Plotting wire centers for base end on plotting board .....	.75	1.50
1	Brass plate with 3 pivots for plotting board		12.00
<i>Laboratory.</i>			
1	Submarine telephone set		50.00
<i>Paints.</i>			
Paints for painting projectiles:			
320	Gallons black	1.00	320.00
5	Gallons white	1.93	9.65
10	Gallons vermilion	6.14	61.40
125	Gallons warm gray	1.98	247.50
131	Gallons blue gray	1.93	252.83
61	Gallons dark buff	1.39	84.79
56	Gallons chrome yellow	2.14	119.84
41	Gallons light yellow	1.70	69.70
135	Gallons light olive green	1.40	189.00
30	Gallons light reddish brown	2.07	62.10
5	Gallons light quaker drab	1.73	8.65
<i>Miscellaneous articles.</i>			
300	Small linen bags	1.94	5.82
600	Pasteboard boxes for ball cartridges, caliber .38 inch .....	.01 $\frac{2}{10}$	7.20
650	Pasteboard boxes for blank cartridges, caliber .38 inch .....	.00 $\frac{8}{10}$	5.20
8	Walnut cases for gunners' quadrants	1.60	12.80
500	Tin cans for smokeless powder cartridges for 3.2-inch shrapnel	9.50	47.50
1,000	Tin cans for smokeless powder cartridges for 5-inch siege rifle	21.00	210.00
750	Tin cans for smokeless powder cartridges for 7-inch howitzer	21.00	157.50
12	Specimen boards, each consisting of 1 base percussion "High C" and one 15-inch combination fuse, and one friction cannon primer, axial vent, sectionalized	9.00	108.00
10	Specimen boards, each consisting of 1 base percussion "High A," and one 15-inch combination fuses, and one electric and one friction obturating cannon primer, sectionalized	13.00	130.00
1	Specimen board, consisting of 1 base percussion "High C," 1 "F" model 1902, and one 15-inch combination fuses, sectionalized		9.50
1	Specimen board, consisting of 1 base percussion "C" and one 15-inch combination fuses, sectionalized		7.00
2	Specimen boards, point percussion fuse "N," sectionalized and with samples of all parts	7.00	14.00
1	Specimen board, point percussion fuse, 1.65 inches, sectionalized and with samples of all parts		7.00
1	Specimen board, base percussion fuse "W," sectionalized and with samples of all parts		8.00
1	Specimen board, base percussion fuse "C," sectionalized and with samples of all parts		7.00
1	Specimen board, base percussion fuse "A," sectionalized and with samples of all parts		7.00
1	Specimen board, centrifugal percussion fuse "12 M," sectionalized and with samples of all parts		8.00

Annual statement of manufactures at Frankford Arsenal, etc.—Continued.

Quantity.	Article.	Price.	Amount.
<i>Miscellaneous articles—Continued.</i>			
1	Specimen board, centrifugal percussion fuse "F," sectionalized and with samples of all parts		\$7.00
1	Specimen board, centrifugal percussion fuse "S," sectionalized and with samples of all parts		7.00
1	Specimen board, 15-inch combination fuse, sectionalized and with samples of all parts		18.00
2	Specimen boards, combination electric and friction primers, for R. F. and seacoast guns, sectionalized and with samples of all parts	\$7.00	14.00
1	Specimen board, electric primer, sectionalized and with samples of all parts		6.00
1	Specimen board, cannon friction primers, axial and radial vents, sectionalized and with samples of all parts		6.00
2	Specimen boards, obturating friction primers, for siege guns, sectionalized and with samples of all parts	6.00	12.00
1	Specimen board, obturating electric primer, screw thread, sectionalized and with samples of all parts		6.00
1	Specimen board, obturating friction primer, screw thread, sectionalized and with samples of all parts		6.00
1	Specimen board, caliber .30 inch, cartridge ball, dummy and blank, with samples of all parts to show each step in manufacture		18.00
<i>Machines.</i>			
1	Hand screw press, for use in resizing 3-inch Hotchkiss & Vickers-Maxim and 1.65-inch cartridge cases		122.00
<i>Inspecting instruments.</i>			
For 1-pounder steel shell:			
5	Minimum fuse seat thread gauges	5.00	25.00
2	Maximum fuse seat thread gauges	5.00	10.00
3	Sets maximum and minimum, fuse thread gauges, internal, for Erhardt fuses	20.00	60.00
1	Set plug gauges, for use as standard reference gauges to detect any wear in the internal fuse thread gauges, for Erhardt fuses		20.00
1	Set gauges, for seat of combination electric and friction primer		12.00
1	Small bore star gauge, for diameters from 1.45 inches to 3 inches		541.50
2	Sections of staff, for small star gauge (36 inches long)	22.50	45.00
1	Star gauge ring, 1.457-inch diameter		1.25
1	Set star gauge points, 6.4-inch diameter		10.00
4	19-inch star gauge points	2.50	10.00
2	Hinged star gauge points for diameter 16.5 inches, for star gauging powder chamber of 12-inch B. L. rifle	10.00	20.00
1	Set maximum and minimum gauges for powder chamber of 3-inch field rifle		80.00
1	Set maximum and minimum gauges, for powder chamber of 15-pounder R. F. gun		100.00
6	Ring gauges, for Driggs-Seabury 15-pounder steel shell	6.00	36.00
1	Gauge to gauge distance from base to band, for Driggs-Seabury 15-pounder steel shell		2.00
2	Ring gauges, for body, rear of band	8.00	16.00
2	Ring gauges, for band	8.00	16.00
2	Ring gauges, for bourrelet	8.00	16.00
2	Snap gauges, body	8.00	16.00
1	Profile gauge		22.00
1	Combined length and depth of cavity gauge, for high-explosive shell for 3-inch R. F. field gun		18.00
For 18 lb., 75 mm. Vickers-Maxim steel shell for high explosives:			
2	Ring gauges, for body	6.00	12.00
2	Ring gauges, for band	6.00	12.00
2	Ring gauges, for rear of band	6.00	12.00
1	Combined length and thickness gauge		21.50
1	Profile gauge		19.00
1	Depth of cavity gauge		6.40
For 6-inch A. P. shot:			
2	Ring gauges, for body	9.00	18.00
2	Ring gauges, for band	9.00	18.00
2	Ring gauges, for bourrelet	9.00	18.00
1	Gauge for rear of band		9.00
1	Profile gauge		24.00
1	Depth of cavity gauge		10.00
1	Templet for band		5.00
1	Templet for band seat		5.00
For 8-inch solid shot:			
2	Ring gauges, for body	9.00	18.00
2	Do	9.00	18.00
2	Ring gauges, for bourrelet	9.00	18.00
1	Profile gauge		33.25
For 12-inch solid shot:			
1	Ring gauge, for body		10.00

Annual statement of manufactures at Frankford Arsenal, etc.—Continued.

Quantity.	Article.	Price.	Amount.
<i>Inspecting instruments—Continued.</i>			
	For 12-inch solid shot—Continued.		
1	Ring gauge, for band.....		\$10.00
1	Ring gauge, for bourrelet.....		10.00
1	Profile gauge.....		39.35
	For 12-inch solid shot, model 1902:		
2	Ring gauges, for band..... each..	\$10.00	20.00
1	Templet for band.....		5.00
1	Templet for band seat.....		5.00
	For cast-iron solid shot, model 1903, for 5-inch R. F. gun:		
2	Ring gauges, for body..... each..	8.00	16.00
2	Ring gauges, for band..... do..	8.00	16.00
2	Ring gauges, for bourrelet..... do..	8.00	16.00
1	Profile gauge.....		28.00
1	Templet for band.....		5.00
1	Templet for band seat.....		5.00
	For cast-iron solid shot, model 1903, for 6-inch R. F. gun:		
2	Ring gauges, for body..... each..	8.00	16.00
2	Ring gauges, for band..... do..	8.00	16.00
2	Ring gauges, for bourrelet..... do..	8.00	16.00
1	Profile gauge.....		28.00
1	Templet for band.....		5.00
1	Templet for band seat.....		5.00
	For cast-iron solid shot, model 1903, for 8-inch B. L. rifle:		
2	Ring gauges, for body..... each..	9.00	18.00
2	Ring gauges, for band..... do..	9.00	18.00
2	Ring gauges, for bourrelet..... do..	9.00	18.00
1	Profile gauge.....		30.00
1	Templet for band.....		5.00
1	Templet for band seat.....		5.00
	For cast-iron solid shot, model 1903, for 12-inch B. L. rifle:		
2	Ring gauges, for band..... each..	10.00	20.00
1	Templet for band.....		5.00
1	Templet for band seat.....		5.00
	For cast-iron solid shot, model 1903, for 12-inch B. L. mortar:		
2	Ring gauges, for band..... each..	10.00	20.00
1	Templet for band.....		5.00
1	Templet for band seat.....		5.00
	For cast-iron solid shot, model 1903, for 12-inch B. L. rifle and 12-inch B. L. mortar:		
2	Ring gauges, for body..... each..	10.00	20.00
2	Ring gauges, for bourrelet..... do..	10.00	20.00
1	Profile gauge.....		38.00
1	Test leveling tool, for correcting sight brackets on guns.....		57.75
1	Set of instruments, for verification of quadrants.....		47.00
50	Fixed crusher gauges, cannon, large..... each..	10.00	500.00
25	Internal crusher gauges, cannon, small..... do..	5.00	125.00
4	Internal crusher gauges, cannon, for subcaliber tubes..... do..	5.00	20.00
4	Internal crusher gauges, cannon, for 1.6-inch gun..... do..	5.00	20.00
18	Internal crusher gauges, cannon, copper covered..... do..	10.00	180.00
40	Blank plugs, for fixed-crusher gauge, cannon, large..... do..	3.00	120.00
1,000	Copper washers, large..... M.		20.00
1,250	Copper washers, small..... M.	15.00	18.75
19,000	Gas-check cups..... M.	5.00	95.00
50	Cylinder holders, steel..... each..	.75	37.50
21	Hexagonal wrenches, steel..... do..	.25	5.25
50	Hexagonal wrenches, bronze, large..... do..	.50	25.00
45	Tool boxes for crusher gauges..... do..	1.60	72.00
<i>Tools and utensils.</i>			
150	Hand-primer extractors, for Armstrong R. F. gun ammunition, each.....	.15	22.50
85	Hand extractors, for Armstrong R. F. gun cartridge case..... each..	1.50	127.50
3	Sets taps, for tapping fuse seat in projectile for Driggs-Seabury 15-pounder R. F. gun..... set..	6.00	18.00
462	Pin wrenches, for keying 15-inch combination fuses..... each..	.03	13.86
8	Wrenches for seating "W" fuses..... do..	.56	4.48
1	Set wrenches, for inserting F. S., and 12-M fuses.....		6.80
1	Set wrenches, for inserting S. D., A. P. D., and T. D. stocks.....		12.00
1	Set wrenches for removing closing caps of F. S., and 12-M fuses.....		12.80
1	Wrench for assembling 12-M and detonating fuses.....		1.00
1	Spanner wrench, for seating combination fuses.....		.25
12	Spanner wrench pins..... each..	.05	.60
1	Reamer and gauge, for primer seat, "Bofors" gun.....		8.50
	For copper-covered crusher gauge for cannon:		
4	Reamers..... each..	.75	3.00
5	T-shaped wrenches..... do..	.50	2.50
4	Spanner wrenches..... do..	.35	1.40
20	Sets decapping and priming tools for 1.65-inch Hotchkiss mountain gun cartridge case..... set..	4.20	84.00
20	Sets decapping and priming tools for 6-pounder R. F. gun cartridge case..... set..	4.60	92.00

Annual statement of manufactures at Frankford Arsenal, etc.—Continued.

Quantity.	Article.	Price.	Amount.
<i>Tools and utensils—Continued.</i>			
6	Sets decapping and priming tools for 75-mm. Vickers-Maxim and 3-inch Hotchkiss gun cartridge cases..... set..	\$2.80	\$16.80
20	Sets decapping and priming tools for 6-pounder and 15-pounder R. F. gun cartridge cases..... set..	6.15	123.00
75	Decapping and cleaning sets for 1-pounder subcaliber ammunition..... set..	2.50	187.50
1	Set reloading and resizing tools for caliber 1.65-inch Hotchkiss mountain gun ammunition.....		129.00
<i>Bench reloading tools, caliber .30-inch.</i>			
1	Primer extracting tool.....		4.26
1	Resizing die, upper, rifle.....		1.50
<i>Bench reloading tools, caliber .45-inch.</i>			
18	Resizing dies, upper, rifle..... each..	1.30	23.40
1	Resizing die, lower..... do..	.70	5.60
<i>Hand reloading and cleaning tools, caliber .30-inch.</i>			
250	Priming tools, without spindles..... each..	1.84	460.00
325	Primer extracting spindles..... do..	.26	84.50
250	Primer inserting spindles..... do..	.18	45.00
350	Chargers, hand..... do..	.10	35.00
250	Loading anvils..... do..	.20	50.00
250	Loading dies..... do..	.25	62.50
250	Loading punches..... do..	.10	25.00
250	Ball molds..... do..	4.73	1,182.50
350	Brass wiping rods..... do..	.13	45.50
350	Brass mouthpieces..... do..	.10	35.00
250	Wooden boxes..... do..	.80	200.00
<i>Hand reloading tools, caliber .45.</i>			
50	Combination anvils..... each..	.75	37.50
80	Adjustable chargers..... do..	.60	48.00
50	Reloading and crimping dies, for rifle and carbine shell..... do..	1.55	77.50
50	Reloading and crimping dies, for revolver shell..... do..	1.25	62.50
50	Resizing dies, for rifle and carbine shell..... do..	2.00	100.00
50	Resizing dies, for revolver shell..... do..	1.00	50.00
50	Drifts..... do..	.06	3.00
50	Powder funnels..... do..	.10	5.00
50	Priming tool spindles..... do..	.26	13.00
80	Priming tools without spindles..... do..	1.84	147.20
50	Reloading punches, for rifle shell..... do..	.60	30.00
50	Reloading punches, for carbine shell..... do..	.60	30.00
50	Reloading punches, for revolver shell..... do..	.50	25.00
50	Resizing punches..... do..	.34	17.00
50	Shell scrapers..... do..	.15	7.50
50	Brass wiping rods..... do..	.15	7.50
50	Tool boxes..... do..	1.85	92.50
Total.....			1,089,600.15

Statement of funds expended at Frankford Arsenal under each appropriation during the fiscal year ended June 30, 1903.

Appropriation.	Amount.
Ordinance Service, 1902.....	\$4,010.84
Ordinance Service, 1903.....	26,757.65
Ordinance Stores—Ammunition, 1902.....	114,250.79
Ordinance Stores—Ammunition, 1903.....	807,035.81
Ordinance Stores—Manufacture, etc., 1902.....	13,782.57
Ordinance Stores—Manufacture, etc., 1903.....	19,346.42
Ordinance Stores—Preservation, 1902.....	5,303.40
Ordinance Stores—Preservation, 1903.....	3,359.62
Ordinance Stores—Repairs, 1902.....	554.37
Ordinance Stores—Repairs, 1903.....	2,022.89
Repairs of Arsenals, 1902.....	9,441.86
Repairs of Arsenals, 1903.....	10,006.85
Manufacture of Arms, 1902-3.....	50,963.80
Manufacture of Arms, 1903-4.....	10,608.37
Frankford Arsenal, 10.....	14,002.29

Statement of funds expended at Frankford Arsenal under each appropriation, etc.—Cont'd.

Appropriation.	Amount.
Frankford Arsenal, 11	\$8,758.59
Frankford Arsenal, 12	22,510.77
Frankford Arsenal, 12-a	24,726.35
Frankford Arsenal, 13	553.92
Frankford Arsenal, 14	16,454.17
Proving Ground, No. 15	50.00
Replacing ordnance and ordnance stores destroyed by fire at Rock Island Arsenal, Ill., 1903-4	146.10
Board of Ordnance and Fortification	1,126.34
Armament of Fortifications:	
No. 1	431.70
No. 4a	260.00
No. 5	1,161.10
No. 9a	37,873.20
No. 17a	14,836.08
No. 17b	24,342.50
No. 19	2,102.83
No. 19a	22,493.73
No. 26a	4,481.35
No. 26b	2,998.13
No. 27	664.31
No. 40	1,732.94
No. 40a	1,045.42
No. 44c	65.00
No. 47	34,620.55
No. 51a	10,178.87
No. 51b	148.51
No. 51c	3,105.48
No. 51d	7,256.36
No. 53	1,885.75
No. 53a	1,927.39
No. 53b	367.41
No. 55	1,017.39
No. 60	10,721.20
Total	1,351,490.47

FRANKFORD ARSENAL, PA., August 29, 1903.

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., during the fiscal year ended June 30, 1903.

Num-ber.	Article.	Average cost of each.	Amount.
CLASS I.			
4	Metallic models of 3-inch field guns, model 1902, one-tenth size, breech mechanism simulated (not working models)	\$70.00	\$280.00
4	Metallic models of 6-inch R. F. rifles, model 1900, one-tenth size, breech mechanism simulated (not working models)	100.00	400.00
4	Metallic models of 15-pounder Bethlehem R. F. gun, one-tenth size, model 1902, breech mechanism simulated (not working models)	30.00	120.00
4	Metallic models of 12-inch B. L. rifle, model 1888 M II, one-tenth size, breech mechanism simulated (not working models)	125.00	500.00
1	Metallic model of 12-inch B. L. mortar, model 1890, one-tenth size (working model)	469.57	469.57
	For finishing and assembling:		
1	3.2-inch B. L. rifle, steel, with Gerdorn breech mechanism	2,000.00	2,000.00
1	3-inch nickel steel R. F. gun, model 1902, Stockett breech mechanism	1,846.93	1,846.93
6	Vicker-Maxim 75 mm. mountain gun	603.00	3,618.00
10	5-inch B. L. rifle, steel, model 1898 M II	1,018.00	10,180.00
23	6-inch R. F. guns, steel, model 1900	2,588.00	59,524.00
18	7-inch B. L. siege howitzers, steel, model 1898	1,018.00	18,324.00
13	10-inch B. L. rifles, steel, model 1895 M I	6,095.00	79,235.00
5	12-inch B. L. rifles, steel, model 1895 M I	7,732.00	38,660.00
3	12-inch B. L. rifles, steel, model 1900	8,936.00	25,782.00
15	12-inch B. L. mortars, steel, model 1890 M I	2,684.00	40,260.00
CLASS III.			
26	Breech covers, for 1.65 1-inch Hotchkiss mountain gun	4.25	110.50
	For 1.65-inch Hotchkiss mountain gun:		
76	Oil cans .....	.50	38.00
18	Hand extractors .....	.50	9.00

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Number.	Article.	Average cost of each.	Amount.
CLASS III—Continued.			
	For 1.65-inch Hotchkiss mountain gun—Continued.		
26	Sponge staves	\$4.00	\$104.00
26	Tompions .....	.50	13.00
82	Gunners' lanyards .....	.80	48.80
50	Bevel extractors .....	.45	22.50
10	Face-plate wrenches	1.50	15.00
50	Wrenches .....	.75	37.50
	For Driggs-Schroeder gun, 6-pounder:		
2	Combined tompons and muzzle covers	1.75	3.50
10	Lanyards	1.00	10.00
25	Lanyards, long	1.75	43.75
23	Lanyards, short	1.50	34.50
15	Mallets, Babbitt metal .....	.50	7.50
50	Lanyards for 15-pounder Driggs-Seabury R. F. gun	1.00	50.00
6	Lanyards for 4-inch Driggs-Schroeder R. F. gun .....	.50	3.00
	For 4.72 inch and 6-inch Armstrong guns:		
2	Muzzle covers .....	.75	1.50
48	Lanyards .....	.50	24.00
	For 3.2-inch B. L. rifles, model 1897:		
50	Lanyards	1.25	62.50
50	Front sight covers .....	.75	37.50
20	Combined tompons and muzzle covers	1.50	30.00
25	Vent punches	1.25	31.25
12	Obturator spindle nut wrenches	2.00	24.00
3	Sight brackets, N. P.	7.80	23.40
25	Gunners' gimlets .....	.30	7.50
25	Priming wires .....	.50	12.50
20	Sponge covers, bore .....	.45	9.00
20	Sponge covers, chamber .....	.50	10.00
30	Scott sight brackets for 3.2-inch and 3.6-inch B. L. rifles	6.00	180.00
39	Combination sight brackets and quadrant seats for 5-inch B. L. siege rifle, model 1898	10.00	390.00
26	Loading trays for 5-inch B. L. siege rifles, model 1898	6.75	175.50
4	Scott sight brackets for 5-inch B. L. siege rifles	6.50	26.00
100	Lanyards for 5-inch and 6-inch R. F. guns	1.00	100.00
1	Breech sight socket for 5-inch siege rifle, model 1890	6.50	6.50
	For 5-inch R. F. guns:		
1	Bar screw-driver for spindle nut, pinion pivot, and hinge screws ..	.75	.75
32	Bar screw-drivers for latch-lever pivot .....	.75	24.00
32	Bar screw-drivers for circuit-breaker housing screws, firing cable cleat screw, firing leaf pivot .....	.75	24.00
32	Bar screw-drivers for spindle-key screw, gear segment screw, slide housing spline screw, latch-bolt seat screw, tripping and stud screws .....	.75	24.00
6	Loading trays	9.00	54.00
	For 6-inch R. F. guns:		
30	Bar screw-drivers for gear segment latch pivot and spindle-key screws .....	.75	22.50
20	Bar screw-drivers for sight bracket and spline screws .....	.75	15.00
20	Gunners' lanyards	1.15	23.00
31	Loading trays, 7-inch B. L. howitzer, model 1898	7.25	224.75
40	Scott sight brackets for 6-inch R. F. gun and 7-inch howitzer	6.50	260.00
	For 8-inch B. L. rifles, model 1888:		
25	Gunners' punches	2.25	56.25
50	Gunners' reamers	1.00	50.00
50	Gunners' gimlets	1.00	50.00
1	Loading tray	12.00	12.00
	For 10-inch B. L. rifles:		
10	Tools for unscrewing housings of crank catch	2.00	20.00
4	Front axial sights	5.29	21.16
4	Rear axial sights	7.94	31.76
5	Loading trays	15.00	75.00
10	Locking nut washers	1.50	15.00
27	Gunners' gimlets	1.00	25.00
25	Gunners' punches	2.25	60.75
25	Gunners' reamers	1.00	25.00
1	Locking nut washer	1.50	1.50
2	Loading trays	15.00	30.00
	For 12-inch B. L. rifle, model 1888:		
2	Front axial sights	5.50	11.00
2	Rear axial sights	8.00	16.00
	For 12-inch B. L. rifle, model 1895:		
20	Obturator nut wrenches	8.00	160.00
20	Wrenches for hinge-pin nut and bronze bushing	7.15	143.00
	For 16-inch B. L. rifle:		
1	Obturator nut wrench	27.00	27.00
1	Locking nut washer	13.80	13.80

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Number.	Article.	Average cost of each.	Amount.
CLASS III—Continued.			
	For 12-inch B. L. mortars:		
80	Gunners' punches	\$2.25	\$180.00
90	Gunners' reamers	1.00	90.00
65	Gunners' gimlets	1.00	65.00
6	Sight brackets, trunnion for 8-inch, 10-inch, and 12-inch B. L. rifles on barbette carriages	12.00	72.00
	For 10-inch disappearing carriage, model 1896:		
1	Wrench for stuffing box	8.50	8.50
2	Cylinder-head extractors	1.50	3.00
	For 12-inch mortar carriage, model 1896:		
9	Lanyards for high-angle lanyard pulls	1.00	9.00
217	High-angle lanyard pulls	16.00	3,472.00
36	Lanyard supports for 8-inch B. L. rifles, model 1888	2.50	90.00
50	Lanyard supports for 10-inch B. L. rifles, model 1888	2.50	125.00
13	Lanyard supports for 10-inch B. L. rifles, model 1895	2.50	32.50
29	Lanyard supports for 12-inch B. L. rifles, model 1888	3.00	87.00
24	Lanyard supports for 12-inch B. L. rifles, model 1895	3.00	72.00
	Obturator nut clamp screw wrenches:		
2	8-inch rifle	4.44	8.88
15	10-inch rifle	4.44	66.60
25	12-inch rifle	4.44	111.00
139	12-inch mortar	4.44	617.16
250	Gunners' sleeves, pairs	1.18	295.00
452	Lanyards for siege and seacoast guns	1.15	519.80
202	Metal scrapers .....	.43	86.86
101	Cleaning reamers for field and siege guns and howitzers	5.00	505.00
191	Cleaning reamers for seacoast guns and mortars	5.00	955.00
100	Sponge and rammer props for seacoast guns	3.00	300.00
50	Sight-retainer catch bands	2.25	112.50
14	Sight-holder stops .....	.25	3.50
63	Cleaning reamers for primer seats of seacoast guns	5.00	315.00
3	Metallic tompons for 15-inch S. B. Rodman gun	2.00	6.00
10	Sponges and rammers for light 12-pounder gun	2.50	25.00
51	Vent pieces, light 12-pounder gun	2.00	102.00
CLASS IX.			
390	Target frames, light interior, 4 by 6 feet	2.25	877.50
200	Target frames, light interior, 6 by 6 feet .....	.75	150.00
96	Target frames, sliding, 6 by 6 feet	1.00	96.00
	For sliding targets, 6 by 6 feet:		
14	Main sills, "A"	1.00	14.00
14	Top beams, "B"	1.00	14.00
28	Cross sills, "C" .....	.90	25.20
28	Posts, "D"	1.05	29.40
28	Braces, "E" .....	.70	19.60
120	Horizontal rails .....	.40	48.00
400	Wooden wedges, W .....	.08	32.00
	For rolling-target frames:		
200	Wooden wedges, Q .....	.08	16.00
67	Wooden pins, S .....	.05	3.35
133	Wooden pins, R .....	.05	6.65
12	Frames for rolling targets, 6 by 6 feet, complete	2.50	30.00
	For sliding-target frames:		
204	Vertical rails .....	.45	91.80
204	Horizontal rails .....	.45	91.80
408	Wedges, W .....	.05	20.40
	For sliding-target frames, 6 by 12 feet:		
192	Vertical rails, S .....	.45	86.40
192	Horizontal rails, T .....	.45	86.40
384	Corner beams, U .....	.30	115.20
384	Wedges, W .....	.05	19.20
768	Pins, X .....	.05	38.40
3	Main sills, "A"	1.40	4.20
3	Top beams, "B"	1.40	4.20
6	Cross sills, "C" .....	.90	5.40
6	Posts, "D"	1.05	6.30
6	Braces, "E" .....	.70	4.20
8	Axes	1.50	12.00
	For Laidley revolving targets, horizontal axis, 6 by 6 feet:		
23	Center or lever blocks .....	.40	9.20
35	Journal boxes .....	.40	14.00
33	Nave boxes .....	.40	13.20
18	Lever .....	.15	2.70
36	Inner rails, T, 6 by 6 feet .....	.15	5.40
96	Side rails, R, 6 by 6 feet .....	.15	14.40
48	Outer rails, S, 6 by 6 feet .....	.15	7.20
48	Wedges, V, 6 by 6 feet .....	.05	2.40
48	Turned pins, P .....	.02	.96
48	Large wedges, M .....	.08	3.84

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Num- ber.	Article.	Average cost of each.	Amount.
CLASS IX—Continued.			
	For Laidley revolving targets, horizontal axis, 6 by 6 feet—Continued.		
24	Small wedges, N	\$0.05	\$1.20
7	Spring blocks, E .....	.75	5.25
	For Laidley revolving targets, horizontal axis, 6 by 12 feet:		
48	Side rails, R. ....	.15	7.20
24	Outer rails, S. ....	.15	3.60
48	Wooden pins, L. ....	.02	.96
24	Braces, corner, X. ....	.15	3.60
48	Pins, N. ....	.02	.96
8	Axes	1.50	12.00
15	Vertical rails, M. ....	.45	6.75
10	Horizontal rails, N. ....	.45	4.50
18	Braces, corner, O. ....	.30	5.40
14	Rear braces, P. ....	.30	4.20
20	Wedges, Q. ....	.05	1.00
40	Pins, R. ....	.05	2.00
30	Pins, headed, S. ....	.08	2.40
CLASS X.			
PARTS PERTAINING TO CLASS I.			
	For Hotchkiss mountain gun, caliber 1.65 inches, fitted for percussion firing:		
10	Stop bolts, unfinished .....	.96	9.60
20	Firing pins.	1.50	30.00
40	Main springs .....	.15	6.00
10	Sears	1.40	14.00
	For Hotchkiss mountain gun, caliber 1.65 inches, fitted for percussion firing:		
2	Front sights, unfinished .....	.90	1.80
20	Sear springs .....	.18	3.60
5	Sear housings	2.80	14.00
10	Sight-bar clamp screws .....	.72	7.20
5	Locking screws, unfinished .....	.48	2.40
	For 6-pounder Driggs-Seabury gun-screw breechblock:		
25	Firing-pin bodies.	6.00	150.00
52	Firing-pin points.	1.25	65.00
30	Firing-pin springs .....	.75	22.50
25	Pawls.	3.00	75.00
25	Pawl pins .....	.25	6.25
20	Plungers .....	.75	15.00
24	Plunger cotter pins. ....	.25	6.00
40	Plunger springs .....	.25	10.00
15	Hinge pins	1.25	18.75
15	Lever pins .....	.75	11.25
40	Carrier plate ring screws .....	.35	14.00
31	Extractors	35.00	1,085.00
19	Triggers	4.75	90.25
50	Trigger springs .....	.40	20.00
20	Locking bolts.	5.05	101.00
42	Locking bolt springs	1.75	73.50
45	Locking bolt spring screws .....	.25	11.25
3	Firing pins, complete	12.00	36.00
1	Trigger	6.85	6.85
	For 6-pounder Driggs-Schroeder gun:		
9	Extractors, right.	15.00	135.00
9	Extractors, left.	15.00	135.00
4	Sears	7.00	28.00
28	Sear springs	3.50	98.00
27	Handle locks	3.25	87.75
14	Cams	12.00	168.00
19	Firing pins	13.00	247.00
32	Firing-pin points.	2.25	72.00
4	Handle stops .....	.25	1.00
10	Tray screws .....	.25	2.50
5	Firing-pin springs .....	.25	1.25
	For 6-pounder Driggs-Seabury R. F. gun, drop block:		
5	Operating levers	15.00	75.00
5	Operating shafts	10.00	50.00
10	Locking springs	6.50	65.00
2	Cam sleeves	25.00	50.00
1	Extractor	25.00	25.00
10	Firing pins	3.50	35.00
10	Firing-pin springs .....	.50	5.00
5	Triggers	5.00	25.00
14	Trigger springs .....	.50	7.00
12	Pawls	4.00	48.00
12	Pawl pins .....	.10	1.20
2	Bracket bearings	16.00	32.00
10	Bracket-bearing locking springs	3.25	32.50

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Num- ber.	Article.	Average cost of each.	Amount.
CLASS X—Continued.			
PARTS PERTAINING TO CLASS I—continued.			
For 6-pounder Driggs-Schroeder:			
10	Firing-pin springs.....	\$0.25	\$2.50
2	Main bolts.....	7.00	14.00
2	Firing pins.....	13.00	26.00
10	Firing points.....	3.00	30.00
2	Operating handles.....	20.00	40.00
5	Handle locks.....	3.50	17.50
5	Handle lock pins.....	.25	1.25
5	Handle detent springs.....	3.00	15.00
For 15-pounder Driggs-Seabury R. F. gun:			
23	Firing pins.....	26.00	598.00
16	Firing-pin springs.....	1.95	31.20
7	Sears.....	19.50	136.50
7	Sear springs.....	1.30	9.10
15	Lock bolts.....	3.25	48.75
50	Lock-bolt springs.....	1.95	97.50
50	Lock-bolt spring screws.....	.32	16.00
45	Plunger springs.....	.80	36.00
10	Plungers.....	1.30	13.00
13	Plunger cotter pins.....	.80	10.40
87	Carrier-plate ring screws.....	45. .50 42. .65	49.80
17	Operating lever pins.....	1.95	33.15
17	Hinge pins.....	3.25	55.25
For 75 mm. Vickers-Maxim mountain gun:			
6	Trigger sears.....	18.00	108.00
6	Trigger sear springs.....	1.00	6.00
6	Hand lever catch springs.....	1.50	9.00
6	Filling plugs with chains and eyebolts.....	2.00	12.00
For 3-inch field gun, model 1902:			
4	Firing pins.....	6.50	26.00
4	Firing-pin springs.....	1.75	7.00
4	Sears.....	3.50	14.00
4	Sear springs.....	.95	3.80
4	Latch-bolt springs.....	.95	3.80
4	Lever latch springs.....	.95	3.80
4	Trigger springs.....	.95	3.80
4	Oil hole covers and screws.....	.95	3.80
1	Hinge pin.....	2.00	2.00
1	Trigger.....	3.50	3.50
1	Hand lever catch pin.....	1.50	1.50
1	Operating lever pivot.....	3.00	3.00
For 3.2-inch B. L. rifle, model 1897:			
2	Front sight screws.....	.32	.64
10	Lever handle screws.....	.32	3.20
2	Carrier ring stop screws.....	.32	.64
3	Vent covers.....	3.90	11.70
1	Vent cover lock screw.....	.32	.32
6	Vent cover screws.....	.25	1.50
1	Hinge pin.....	2.00	2.00
51	Hinge pin screws.....	.32	16.32
66	Pads.....	2.60	171.60
15	Split rings, front.....	6.50	97.50
13	Split rings, rear.....	6.50	84.50
1	Vent piece for radial vent.....	2.25	2.25
4	Vent closers for radial vent.....	6.60	26.40
64	Vent bushings, copper, latest model.....	6.00	384.00
14	Vent bushings, copper, latest model.....	4.50	63.00
12	Latch bolts.....	1.95	23.40
70	Latch bolt springs.....	.65	45.50
4	Block handles.....	6.50	26.00
10	Block handle screws.....	.65	6.50
25	Block carrier stop screws.....	.32	8.00
6	Spline screws.....	.32	1.92
5	Obturator spindles with nuts and spline screws.....	14.00	70.00
1	Obturator spindle.....	9.00	9.00
1	Obturator spindle nut.....	1.50	1.50
1	Obturator spline screw.....	.25	.25
1	Adjusting screw and washer for subcaliber attachment of 3.2-inch rifle.....	.50	.50
1	New jacket and Stockett breech mechanism for 3.2-inch rifle, No. 225.....	1,500.00	1,500.00
For Driggs-Schroeder 4-inch R. F. gun:			
5	Sears.....	12.00	60.00
2	Sear springs.....	4.00	8.00
2	Firing pins.....	4.00	8.00
3	Firing points.....	1.25	3.75
28	Steel washers, insulated with screws for 4.72-inch R. F. Armstrong gun for firing with 1-pounder subcaliber tubes.....	6.61	185.08

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Number.	Article.	Average cost of each.	Amount.
CLASS X—Continued.			
PARTS PERTAINING TO CLASS I—continued.			
	For 4.72-inch Armstrong R. F. guns, .40, .45, and .50 calibers:		
2	Firing pins	\$5.20	\$10.40
16	Firing pins, subcaliber, with lock nut	11.00	176.00
4	Sear washers .....	.25	1.00
9	Sear caps .....	.50	4.50
8	Lanyard rings	2.25	18.00
27	Carrier latch springs	3.25	87.75
4	Firing-pin bushings	8.82	35.28
28	Firing pins, complete, subcaliber, with nuts	32.00	896.00
1	Operating lever handle catch bolt, complete, for 5-inch siege rifle, model 1898 M11	5.00	5.00
2	Hinge pins with screws for 5-inch siege rifles, model 1900	5.00	10.00
	For 5-inch R. F. guns, model 1897:		
2	Firing leaf springs .....	.75	1.50
2	Latch springs	3.25	6.50
7	Lock bolts	7.00	49.00
6	Lock-bolt seats	14.00	84.00
1	Split ring, front	10.50	10.50
12	Lock-bolt seat screws	1.30	15.60
1	Split ring, rear	10.50	10.50
6	Tripping studs	12.00	72.00
1	Split ring, small	5.00	5.00
12	Tripping-stud screws	1.30	15.60
1	Spindle	32.00	32.00
1	Obturator ball washer	18.00	18.00
13	Breechblock oil-hole screws .....	.32	4.16
17	Pads	4.50	76.50
4	Steel washers, insulated with screws for 6-inch R. F. Armstrong guns for firing with 1-pounder subcaliber tubes	6.61	26.44
	For 6-inch Armstrong gun:		
15	Firing pins, subcaliber, with nuts	3.50	52.50
5	Carrier-latch springs	3.50	17.50
	For 6-inch R. F. gun, model 1897:		
1	Adapter bushing	5.00	5.00
1	Auxiliary slide	15.00	15.00
9	Ejectors	10.00	90.00
6	Slide-housing spline screws .....	.65	3.90
1	Firing attachment, complete	175.00	175.00
14	Split rings, front	11.50	161.00
14	Split rings, rear	11.50	161.00
14	Split rings, small	5.30	74.20
6	Slide handles	8.82	52.92
6	Breechblock oil-hole screws .....	.25	1.50
8	Firing leaf springs	3.25	26.00
8	Gas check pads	5.75	46.00
25	Latch lever springs	1.50	37.50
10	Lock bolt seats	13.50	135.00
20	Lock bolt seat screws	1.30	26.00
10	Tripping studs	13.00	130.00
20	Tripping stud screws	1.30	26.00
24	Contact plate insulations .....	.25	6.00
	For 6-inch R. F. gun, model 1900:		
1	Firing mechanism complete	216.68	216.68
1	Safety lever	13.23	13.23
1	Circuit breaker housing, complete	17.64	17.64
100	Insulating washers for 4.72-inch and 6-inch R. F. Armstrong guns .....	.10	10.00
1	Hinge pin for 7-inch howitzer, model 1890	4.00	4.00
	For 7-inch howitzer, model 1890:		
1	Latch	5.00	5.00
1	Lever handle latch	5.00	5.00
1	Obturator nut spline screw .....	.50	.50
1	Stop screw .....	.50	.50
1	Vent cover	8.00	8.00
2	Pads	4.50	9.00
1	Pad for 7-inch howitzer, model 1898	4.50	4.50
	For 8-inch B. L. rifles, model 1888 and modifications:		
29	Translating rollers	17.50	507.50
6	Translating roller nuts	1.50	9.00
6	Translating roller nut pins .....	.50	3.00
10	Tray latches, complete	19.00	190.00
11	Tray latches with handles	19.50	214.50
6	Tray latch catches	13.23	79.38
12	Tray latch catch screws .....	.55	6.60
38	Tray lock bolts	6.75	256.50
18	Tray lock levers	4.00	72.00
5	Tray lock links	4.50	22.50

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Number.	Article.	Average cost of each.	Amount.
CLASS X—Continued.			
PARTS PERTAINING TO CLASS I—continued.			
For 8-inch B. L. rifles, model 1888, and modifications—Continued.			
25	Tray lock link pins.....	\$0.65	\$16.25
25	Tray lock lever pivots.....	1.30 } 1.00 }	28.60
14	Tray latch pins.....	.65	9.10
17	Tray latch pivot pins.....	1.50	25.50
17	Tray latch pivot washers.....	1.50	25.50
20	Translating crank nuts.....	1.50	30.00
20	Translating crank nut pins.....	.50	10.00
31	Tray back latch catches.....	4.50	139.50
67	Tray back latch catch screws.....	.50	33.50
20	Translating studs, assorted.....	21.75	435.00
13	Tray lock pins.....	.50	6.50
5	Hinge pin oil hole screws.....	.32	1.60
30	Gas check pads.....	7.00	210.00
45	Rotating crank lock housings.....	1.95	87.75
30	Rotating crank lock bolts.....	3.25	97.50
30	Rotating crank lock springs.....	.65	19.50
30	Rotating crank lock washers.....	.32	9.60
30	Rotating crank lock handles.....	3.25	97.50
30	Rotating crank lock housing screws.....	.50	15.00
30	Rotating crank lock handle pins.....	.32	9.60
28	Split rings, small.....	* 6.50	182.00
8	Split rings, front.....	13.00	104.00
8	Split rings, rear.....	13.00	104.00
16	Tray spring bolts, $\frac{3}{8}$ -inch longer than standard.....	9.00	144.00
3	Tray spring bolts complete, 1-inch longer than standard.....	9.00	27.00
12	Rotating crank lock housing screws.....	.32	3.84
56	Tray spring bolt springs.....	1.30	72.80
2	Tray latches.....	15.00	30.00
35	Tray spring-bolt springs.....	1.00	35.00
13	Tray spring bolts.....	8.50	110.50
30	Tray spring-bolt shoes.....	3.25	97.50
30	Tray spring-bolt shoe screws.....	.65	19.50
3	Tray latch handles.....	6.61	19.83
3	Tray back latch handles.....	2.20	6.60
17	Tray latch pivots.....	2.25	38.25
2	Rotating crank-nut pins.....	.32	.64
13	Vent covers.....	6.00	78.00
13	Obturator spindle plates for use with subcaliber tube for 8-inch rifle.....	2.00	26.00
For 10-inch B. L. rifles, model 1888, and modifications:			
2	Translating cranks.....	35.28	70.56
10	Vent covers.....	7.75	77.50
5	Tray spring bolts, $\frac{1}{2}$ -inch longer than standard, and not tempered.....	4.41	22.05
12	Tray spring bolts, $\frac{1}{4}$ -inch longer than standard.....	13.23	158.76
33	Tray lock links.....	4.70	148.50
29	Tray lock bolts.....	6.75	195.75
36	Tray lock levers.....	5.20	187.20
37	Tray lock-link pins.....	1.95	72.15
51	Tray lock-lever pivots.....	1.30	66.30
5	Tray latches, complete.....	19.50	97.50
1	Tray latch body.....	15.50	15.50
5	Obturator nuts (new design).....	17.24	86.20
1	Tray latch handle.....	4.00	4.00
12	Tray latch pins.....	.65	7.80
12	Tray latch-pin nuts.....	.40	4.80
12	Tray latch pin nut pins.....	.20	2.40
15	Tray back latch catches.....	5.20	78.00
45	Tray back latch catch screws.....	.50	22.50
16	Tray latch pivots.....	3.30	52.80
16	Tray latch pivot washers.....	1.50	24.00
16	Tray latch pivot pins.....	1.50	24.00
10	Tray latches with handles.....	15.50	155.00
32	Tray spring bolts, $\frac{1}{2}$ -inch longer than standard.....	4.41	141.12
31	Tray spring bolts, $\frac{3}{8}$ -inch longer than standard.....	4.41	136.71
38	Tray spring bolt shoes.....	3.25	123.50
38	Tray spring bolt shoe screws.....	.65	24.70
79	Tray spring bolt springs.....	1.30	102.70
18	Translating studs, assorted.....	21.75	391.50
55	Gas check pads.....	7.80	429.00
1	Breechblock oil-hole screw.....	.32	.32
4	Breech plate oil-hole screws.....	.32	1.28
10	Translating rollers.....	20.00	200.00
9	Translating roller nuts.....	1.50	13.50
9	Translating roller nut pins.....	.50	4.50
2	Rotating crank lock plates, lower.....	1.75	3.50
2	Rotating crank lock plates, upper.....	1.75	3.50
9	Rotating crank lock bolts.....	3.25	29.25

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Number.	Article.	Average cost of each.	Amount.
CLASS X—Continued.			
PARTS PERTAINING TO CLASS I—continued.			
For 10-inch B. L. rifles, model 1888, and modifications—Continued.			
9	Rotating crank lock washers.....	\$0.32	\$2.88
9	Rotating crank lock handles.....	2.25	20.25
9	Rotating crank lock handle pins.....	.32	2.88
9	Rotating crank lock springs.....	.65	5.85
32	Rotating crank lock housing screws.....	.32	10.24
22	Split rings, front.....	14.30	314.60
22	Split rings, rear.....	14.30	314.60
25	Split rings, small.....	7.00	175.00
10	Vent covers.....	7.75	77.50
17	Vent cover pivots.....	.65	11.05
5	Hinge pin oil hole screws for 10-inch and 12-inch rifles, model 1888.....	.32	1.60
For 10-inch B. L. rifles, model 1895, and modifications:			
4	Breechblock oil hole screws.....	.25	1.00
1	Compound gear.....	45.00	45.00
1	Vent cover.....	6.00	6.00
1	Filling-in disk.....	22.16	22.16
1	Obturator ball bearing sets.....	20.00	20.00
1	Tray ball bearing sets.....	15.00	15.00
11	Tray latches.....	17.00	187.00
20	Tray latch springs.....	.50	10.00
9	Tray latch lock bolts.....	1.50	13.50
19	Tray latch lock bolt springs.....	.50	9.50
1	Tray latch spring stud.....	2.00	2.00
2	Thrust bearings, pairs.....	30.00	60.00
14	Gas check pads.....	6.00	84.00
9	Tray latch operating studs.....	.50	4.50
21	Split rings, front.....	11.00	231.00
21	Split rings, rear.....	11.00	231.00
21	Split rings, small.....	5.00	105.00
36	Hinge pin oil hole screws for 10-inch and 12-inch rifles, model 1888, and 12-inch mortars.....	.32	11.52
For 12-inch B. L. rifles, model 1888, and modifications:			
13	Tray latches.....	21.00	273.00
6	Tray latch catches.....	13.23	79.38
7	Tray lock levers.....	5.20	36.40
25	Tray lock link pins.....	1.95	48.75
19	Tray latch pins.....	1.50	28.50
19	Tray latch pin nuts.....	1.50	28.50
6	Tray latch pin nut pins.....	.20 } .25 } 1. } .75 }	1.25
35	Tray back latch catch screws.....	.75 }	26.25
22	Tray spring bolts.....	12.00 } 9.50 }	226.50
53	Tray spring bolt springs.....	1.30 }	68.90
31	Tray spring bolt shoes.....	2.25 } 2.50 }	73.00
31	Tray spring bolt shoe screws.....	.65 }	20.15
25	Tray lock links.....	4.50 }	112.50
18	Tray lock lever pivots.....	1.00 }	18.00
15	Tray ball bearings, sets.....	15.00 }	225.00
15	Tray lock bolts.....	6.50 }	97.50
7	Tray back latch catches.....	6.50 }	45.50
12	Tray latch catch screws.....	.55 }	6.60
10	Tray latch pivots.....	3.30 }	33.00
10	Tray latch pivot washers.....	1.50 }	15.00
10	Tray latch pivot pins.....	1.50 }	15.00
11	Tray spring bolts, $\frac{3}{8}$ -inch longer than standard.....	4.41 }	48.51
10	Tray spring bolts, complete, $\frac{1}{16}$ -inch longer than standard.....	16.20 }	162.00
17	Translating rollers.....	23.40 }	397.80
17	Translating crank nuts.....	3.00 }	51.00
17	Translating crank nut pins.....	.35 }	5.95
5	Translating studs.....	21.75 }	108.75
9	Rotating crank lock bolts.....	3.25 }	29.25
22	Rotating crank lock springs.....	.65 }	14.30
3	Rotating crank lock washers.....	.32 }	.96
3	Rotating crank lock handles.....	3.25 }	9.75
3	Rotating crank lock handle pins.....	.32 }	.96
12	Rotating crank lock housing screws.....	.32 }	3.84
1	Translating roller with nut and pin.....	27.00 }	27.00
16	Gas check pads.....	8.00 }	128.00
4	Split rings, front.....	15.50 }	62.00
4	Split rings, rear.....	15.50 }	62.00
4	Split rings, small.....	7.75 }	31.00
10	Vent covers.....	9.10 }	91.00
5	Vent cover pivots.....	.65 }	3.25
26	Hinge pin oil hole screws for 10-inch and 12-inch rifles, model 1895.....	.65 }	16.90

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Number.	Article.	Average cost of each.	Amount.
CLASS X—Continued.			
PARTS PERTAINING TO CLASS I—continued.			
For 12-inch B. L. rifles, model 1895, and modifications:			
17	Vent covers.....	\$7.00	\$119.00
2	Split rings, front.....	12.00	24.00
2	Split rings, rear.....	12.00	24.00
2	Split rings, small.....	6.00	12.00
2	Obturator ball bearings, sets.....	25.00	50.00
15	Obturator washers, complete.....	25.00	375.00
15	Tray ball bearings, sets.....	23.40	351.00
22	Tray latches.....	33.00	726.00
32	Tray latch springs.....	.65	20.80
22	Tray latch lock bolts.....	1.50	33.00
42	Tray latch lock bolt springs.....	.50	21.00
27	Tray latch operating studs.....	.50	13.50
4	Thrust bearings, for worm shafts.....	7.50	30.00
60	Breechblock oil hole screws.....	.32	19.20
2	Worm shafts.....	25.00	50.00
2	Worm wheels.....	35.00	70.00
17	Worm and shaft ball washers.....	12.70	215.90
13	Gas check pads.....	6.50	84.50
3	Split rings, front.....	15.50	46.50
3	Split rings, rear.....	15.50	46.50
25	Split rings, small.....	7.80	195.00
5	Vent cover pivots.....	1.59	7.95
For 12-inch B. L. mortars:			
11	Split rings, front.....	14.30	157.30
11	Split rings, rear.....	14.30	157.30
11	Split rings, small.....	7.00	77.00
4	Translating studs.....	25.00	100.00
4	Tray back latches.....	16.00	64.00
311	Tray spring bolt springs.....	1.30	404.30
42	Tray spring bolts.....	9.00	378.00
38	Tray spring bolt shoes.....	2.50	95.00
76	Tray spring bolt shoe screws.....	.65 } .50 }	43.70
11	Tray lock link pins.....	5.20	57.20
11	Tray lock levers.....	2.00	22.00
13	Tray latch handles.....	6.60	85.80
21	Tray latches.....	19.50	409.50
19	Tray back latch catches.....	12.00	228.00
12	Tray latch pivot pins.....	.65	7.80
2	Firing mechanisms.....	150.00	300.00
1	Subcaliber slide.....	16.00	16.00
1	Guide pin.....	2.50	2.50
148	Screws for locating quadrants.....	.25	37.00
20	Adapter bushings.....	2.50	50.00
12	Clamping nuts.....	13.00	156.00
1	Spindle.....	87.30	87.30
1	Obturator nut.....	12.95	12.95
1	Locking nut.....	8.59	8.59
51	Rotating crank lock front studs.....	2.60	132.60
37	Rotating crank lock springs.....	.65	24.05
37	Rotating crank lock rear studs.....	3.25	120.25
37	Rotating crank lock handles.....	3.25	120.25
37	Rotating crank lock handle pins.....	.32	11.84
1	Rotating crank gear nut.....	2.25	2.25
1	Rotating crank lock housing.....	1.95	1.95
1	Rotating pinion bushing, outer.....	4.41	4.41
12	Housing springs for firing mechanism.....	4.25	51.00
6	Springs for combination firing mechanism.....	4.25	25.50
12	Stop springs for firing mechanism.....	4.25	51.00
52	Gas check pads.....	7.80	405.60
17	Translating rollers.....	19.50	331.50
12	Translating crank nuts.....	2.25	27.00
12	Translating crank nut pins.....	.25	3.00
100	Hinge pin oil hole screws.....	.32	32.00
1	Bronze tray (consoles).....	160.00	160.00
22	Vent covers.....	10.40	228.80
12	Vent cover screws.....	.32	3.84
For 12-inch B. L. mortars, cast iron, steel-hooped:			
6	Split rings, front.....	14.30	85.80
6	Split rings, rear.....	14.30	85.80
16	Tray spring bolts.....	4.41	70.56
16	Tray spring bolt springs.....	.55	8.80
2	Translating crank handles.....	23.40	46.80
6	Translating rollers.....	52.92	317.52
6	Tray latches.....	35.28	211.68
1	Tray latch handle.....	6.60	6.60
10	Tray back latches with handles.....	30.87	308.70

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Number.	Article.	Average cost of each.	Amount.
CLASS X—Continued.			
PARTS PERTAINING TO CLASS I—continued.			
8	Parts for firing by friction 12-inch mortars on carriages of model 1896, at high angles of elevation.....sets.....	\$16.60	\$132.80
	Bronze models, roughly assimilated pieces of breech mechanism:		
1	Block carrier.....	20.50	20.50
1	Breechblock.....	13.50	13.50
1	Hand lever.....	20.00	20.00
1	Extractor.....	4.50	4.50
1	Extractor lever.....	7.00	7.00
1	Hand lever catch.....	3.62	3.62
1	Cocking lever.....	3.63	3.63
1	Breechblock cover.....	5.00	5.00
56	Hinge-pin oil screws for 10-inch and 12-inch B. L. rifles, model 1895.....	.25	14.00
2	Experimental adapters for use in Spanish howitzers and rifles now mounted in Porto Rico.....	2.20	4.40
1	Obturator spindle for 12-inch B. L. rifle, No. 3, Bethlehem model 1895 Mr.....	162.45	162.45
	Rotating bars for rifles, model 1888:		
1	9-inch.....	30.00	30.00
1	10-inch.....	28.00	28.00
1	12-inch.....	28.00	28.00
1	Breech mechanism, complete, having new combination electric-friction firing attachment for 5-inch R. F. gun, No. 2, model 1897.....	771.00	771.00
58	Cable clamps, 5-inch R. F. guns.....	5.00	290.00
30	Clamping screws for spindle nuts for 6-inch R. F. guns, with Stockett breech mechanism.....	6.77	203.10
30	Contact plates for 6-inch firing attachments.....	6.63	198.90
58	Cable clamps, 6-inch R. F. gun.....	5.00	290.00
53	Contact pins, 5-inch and 6-inch R. F. guns.....	1.00	53.00
61	Contact pieces, 5-inch and 6-inch R. F. guns.....	1.00	61.00
122	Coupling pieces, 5-inch and 6-inch R. F. guns.....	1.50	183.00
12	Broadwell rings, 12 cm.....	6.00	72.00
	With copper and brass protecting rings:		
2	Pads, 5-inch rifle.....	8.16	16.32
2	Pads, 6-inch rifle.....	9.11	18.22
2	Pads, 8-inch rifle.....	10.06	20.12
2	Pads, 10-inch rifle, model 1895.....	10.52	21.04
2	Pads, 12-inch rifle, model 1895.....	11.01	22.02
1	Pad, 10-inch rifle, model 1895, with copper protecting disk.....	10.52	10.52
	Substituting oleo stearin for tallow, and waterproofing canvas with oleo stearin:		
4	Pads, 6-inch rifle.....	5.75	23.00
2	Pads, 12-inch rifle, model 1895.....	6.50	13.00
	Service waterproofed with oleo stearin:		
4	Pads, 5-inch rifle.....	5.75	23.00
2	Pads, 10-inch rifle, model 1895.....	6.00	12.00
PARTS PERTAINING TO CLASS II.			
100	Linch washers (leather).....	.05	5.00
	For 3.2-inch carriage:		
1	Front footboard for limber.....	.25	.25
1	Rear footboard for limber.....	.25	.25
PARTS PERTAINING TO CLASS III.			
20	Sponges, woolen, for light 12-pounder guns.....	.75	15.00
50	Springs for 3.2-inch sponges and rammers, chamber.....	.25	12.50
2	Rods for bristle sponges for 6-pounder Driggs-Schroeder R. F. gun, mark III.....	4.75	9.50
12	Lanyard buttons for 6-pounder Driggs-Seabury gun, screw block, after gun No. 21.....	4.50	54.00
24	Neck-yoke pads, black leather.....	.50	12.00
6	Lead-rein roller straps, black leather.....	.25	1.50
PARTS PERTAINING TO CLASS VIII.			
2,500	Zinc plugs for "C" fuse hole.....	.03	75.00
PART 2.			
Lumber.			
32	Spruce strips, 4 by 1 inch by 13 feet, target practice.....pieces..	.14	4.48
20	Scantling, planed, 2 by 4 inches by 6 feet.....do.....	.25	5.00
Miscellaneous articles.			
645	Boxes, packing.....	1.00	645.00
276	Crates, packing.....	.75	207.00
75	Boxes, packing, for ammunition, 3.2-inch B. L. rifle, model 1897.....	1.25	93.75
20	Boxes, packing, for 5-inch shell (2 shells in a box).....	.48	9.60

Statement of stores fabricated and their cost at Watervliet Arsenal, N. Y., etc.—Continued.

Num-ber.	Article.	Average cost of each.	Amount.
PART 2—Continued.			
<i>Inspecting instruments.</i>			
41	Templets and gauges for 3-inch nickel steel guns with Gerdorn breech mechanism, for contractors, sets (3).....set..	\$4,600.00	\$13,800.00
<i>Tools, utensils, etc.</i>			
For portable forges, Empire:			
27	Forge chests.....	7.50	202.50
12	Fore punches and creasers.....	.76	9.12
14	Chisels, handled.....	.60	8.40
18	Tongs.....	.65	11.70
13	Nail punches.....	.10	1.30
15	Pritchels.....	.20	3.00
19	Hardies.....	.40	7.60
17	Clinching irons.....	.40	6.80
14	Toe knives.....	.12	1.68
15	Fire rakes.....	.10	1.50
13	Fire shovels.....	.50	6.50
38	Anvils.....	8.00	304.00
13	Anvil blocks.....	2.65	34.45
28	Shoeing boxes, leather.....	2.50	70.00
13	Buckets, iron.....	.95	12.35
42	Smiths' aprons.....	1.50	63.00
20	Anvil and block chests.....	6.00	120.00
100	Handles for hand mallets.....	.15	15.00
106	Handles for copper hammers.....	.10	10.60
12	Vaseline cans, 1 gallon.....	1.25	15.00
2	Combination screw-drivers for 4.72-inch R. F. Armstrong guns.....	4.00	8.00
Tray latch templets:			
8	8-inch rifle, model 1888.....	6.82	52.96
8	10-inch rifle, model 1888.....	6.62	52.96
8	12-inch rifle, model 1888.....	6.62	52.96
8	12-inch mortar.....	6.62	52.96
5	Drill washer supports, 6-pounder Driggs-Schroeder R. F. gun.....	2.00	10.00
6	Hammers, copper, for 5-inch R. F. gun.....	1.15	6.90
6	Hammers, copper, for 6-inch R. F. gun.....	1.15	6.90
20	Screw-driver blades, No. 1.....	.015	.30
20	Screw-driver blades, No. 2.....	.015	.30
25	Screw-driver blades, No. 3.....	.02	.50
15	Screw-driver blades, No. 6.....	.02	.30
4	Screw-driver attachments for monkey wrenches, 12-inch mortar.....	.75	3.00
For removing and replacing vent bushings in spindles, 3.2-inch field rifles:			
18	Counterbores.....	3.50	63.00
3	Counterbores, short.....	2.57	7.71
3	Taper reamers for long taper.....	6.99	20.97
3	Taper reamers for short taper.....	6.99	20.97
3	Countersinks.....	2.57	7.71
3	Taps (3 per set).....sets..	10.63	31.89
3	Taps, bottom.....	2.57	7.71
12	Sets, riveting.....	1.19	14.28
For cylinder for 3-inch field carriage, model 1902:			
1	Boring bar.....	809.03	809.03
2	Reamers.....		
2	Hognose tools.....		
1	Slotting head.....		
1	Slotting bar.....		
1	Former bar.....		
1	Slotting head, complete.....		
1	Rear bearing.....	}	
2	Templets for curve.....		
For pistons for 3-inch field carriage, model 1902:			
2	Boring bars.....	}	
1	Hognose tool.....		
1	Reamer.....		
2	Keys for slotting bars.....		
Grand total.....			345,606.30

Statement of funds expended under each appropriation at Watervliet Arsenal during the fiscal year ended June 30, 1903.

Ordinance Service, 1902	\$2,915.90
Ordinance Stores—Manufacture, etc., 1902	2,743.09
Ordinance Stores—Preservation, 1902	48.17
Repairs of Arsenals, 1902	2,067.44
Ordinance Service, 1903	28,088.40
Ordinance Stores—Manufacture, etc., 1903	46,899.51
Ordinance Stores—Preservation, 1903	625.00
Ordinance Stores—Repairs, 1903	306.20
Repairs of Arsenals, 1903	19,911.26
Manufacture of Arms, 1902-3	10,717.85
Watervliet Arsenal, No. 17a	23,168.52
Watervliet Arsenal, No. 19a	630.04
Watervliet Arsenal, No. 20	899.57
Armament of Fortifications:	
No. 7	155,450.90
No. 9	596.12
No. 9a	6,722.59
No. 10a	336.00
No. 26	25,621.94
No. 26a	694.59
No. 26b	9,771.34
No. 27	1,221.25
No. 31a	111.70
No. 46	42,441.05
No. 47	152,232.95
No. 51a	914.43
No. 52	462.92
No. 55	1,698.13
No. 55a	356.42
No. 60	1,210.93
Ordinance Material (Proceeds of Sales)	3,081.87
Total expenditures	541,946.08

WATERVLIET ARSENAL, *September 21, 1903.*

Annual statement of manufactures and their cost at Watertown Arsenal, Mass., for the fiscal year ended June 30, 1903.

Quantity.	Articles.	Price.	Amount.
CLASS II.			
Carriages:			
2	75 mm. mountain gun, Vickers-Maxim	\$780.78	\$1,561.56
22	7-inch siege mortar and platforms	900.00	19,800.00
1	12-inch barbette, model 1892		12,000.00
CLASS III.			
* Rammers and staves:			
15	5-inch R. F. gun	8.43	126.40
10	6-inch R. F. gun	8.36	83.60
3	8-inch M. L. converted rifle	3.52	10.56
3	8-inch B. L. rifle (disappearing carriage)	11.16	33.48
4	10-inch B. L. rifle (disappearing carriage)	16.58	66.32
4	12-inch B. L. rifle (barbette carriage)	12.00	48.00
10	12-inch B. L. rifle (disappearing carriage)	11.93	119.28
55	12-inch B. L. mortar	8.26	454.25
Sponges and staves:			
10	12 cm. B. L. rifle, siege	21.53	215.30
2	4.72-inch A. R. F. gun	10.16	20.32
42	5-inch R. F. gun	7.54	316.68
31	6-inch R. F. gun	7.69	238.39
1	8-inch converted rifle		10.00
1	10-inch B. L. rifle, bore		14.12
3	12-inch B. L. rifle, bore	14.20	42.60
2	12-inch B. L. mortar, bore and chamber	12.00	24.00
2	15-inch S. B. gun	9.51	19.02
Special bore sponges with staves:			
2	4.72-inch A. R. F. gun	4.79	9.58
26	6-inch R. F. gun	5.94	154.50
6	12-inch B. L. rifle	9.00	54.00
15	12-inch B. L. mortar	9.00	135.00
Slush brushes with handles:			
30	5-inch R. F. gun	3.47	104.10
20	6-inch R. F. gun	3.68	73.60
10	8-inch B. L. rifle	4.00	40.00
3	10-inch B. L. rifle	4.50	13.50
13	12-inch B. L. rifle	4.32	56.16
26	12-inch B. L. mortar	4.50	117.00

Annual statement of manufactures and their cost at Watertown Arsenal, etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS III—Continued.			
	Scrapers with sockets, steel:		
2	4.72-inch A. R. F. gun	\$2.03	\$4.06
14	5-inch R. F. gun	2.40	33.60
20	6-inch R. F. gun	2.13	42.60
4	Pinch bars	2.45	9.80
2	Pinch bars, 12-inch disappearing carriage, model 1897	4.38	8.76
10	Pinch bars, 5-foot	1.50	15.00
2	Pinch bars, 6-foot	1.50	3.00
11	Pinch bars, 7-foot	1.57	17.27
	8-inch B. L. rifle:		
3	Sponge covers, bore	1.54	4.62
3	Sponge covers, chamber	1.59	4.77
12	Sponges, bore, 15 cm.	8.50	102.00
10	Sponges, chamber, 15 cm.	6.50	65.00
4	Sponges and rammers, combined, 15 cm. mortar	5.00	20.00
	Shot or shell tongs:		
3	8-inch M. L. rifle	9.90	29.70
6	8-inch B. L. rifle	7.92	47.52
12	10-inch B. L. rifle	16.80	201.60
10	12-inch B. L. rifle	12.39	123.90
16	12-inch B. L. mortar	11.62	185.92
16	12-inch B. L. mortar, model 1891	24.00	384.00
CLASS IV.			
200	Shell, c. i., 75 mm. Vickers-Maxim mountain gun	3.46	692.00
150	Shell, c. i., 15-pounder R. F. seacoast gun	2.00	300.00
300	Shell, c. i., for 3-inch B. L. rifle	2.18	654.00
50	Shot, c. i., for 10-inch B. L. rifle	28.03	1,401.50
48	Shot, c. i., for 12-inch B. L. mortar (800 pounds)	21.51	1,032.48
75	Shot, c. i., for 16-inch B. L. rifle	60.83	4,562.65
CLASS IX.			
9	Ammunition trucks for 10-inch disappearing carriage, model 1894 ...	300.00	2,700.00
22	Ammunition trucks for 10-inch disappearing carriage	298.00	6,556.00
	Blocks, wood, assorted:		
1,200	12 by 12 by 44 inches	1.69	2,028.00
834	12 by 6 by 44 inches .....	.96	800.64
500	12 by 4 by 44 inches .....	.84	420.00
250	12 by 2 by 44 inches .....	.47	117.50
25	4 by 8 by 44 inches .....	.50	12.50
50	2 by 10 by 18 inches .....	.24	12.00
50	Quarter .....	.35	17.50
13	Capstans, complete	82.63	1,074.10
2	Cradles, 16 by 4 feet	44.07	88.14
	Dummy projectiles:		
15	4.72 R. F. gun	14.37	215.55
68	5-inch R. F. gun	13.93	947.12
76	6-inch R. F. gun, Ordnance Department	16.57	1,258.94
16	6-inch R. F. gun	16.59	265.44
25	8-inch B. L. rifle	22.78	569.50
27	10-inch B. L. rifle	28.93	781.11
31	12-inch B. L. rifle	40.00	1,240.00
2	12-inch B. L. mortar, steel	37.00	74.00
20	12-inch B. L. mortar, c. i. steel hooped	37.00	740.00
6	Dog chains	16.25	97.50
5	Gin slings	14.51	72.55
5	Gin falls for Piper gin	10.83	54.15
1	Gin fall, garrison	4.52	4.52
6	Gin handspikes, "Piper"	1.55	9.30
5	Gins, Piper, complete	200.37	1,001.85
12	Gins, garrison, complete	274.30	3,291.60
9	Gun chocks, 15-inch S. B. gun .....	.25	2.25
1	7-inch mortar platform, unassembled	153.75	153.75
4	Models for 12-inch barbette carriage, model 1892	430.00	1,720.00
192	Planks 2 by 12 inches by 30 feet	1.97	378.84
40	Planks 10 by 2 inches by 18 feet	1.08	43.20
9	Sling ropes	10.51	94.65
5	Sling carts, hand	97.71	488.55
44	Targets, artillery, floating, complete	62.55	2,752.00
1	Targets, artillery, floating, special	94.28	94.28
20	Targets, artillery, towing, complete	50.56	1,011.20
12	Targets, artillery, floating or towing, 24 feet	135.70	1,628.40
2	Targets, experimental	75.00	150.00
	Timbers:		
25	10 by 10 inches by 35 feet	9.36	234.00
30	10 by 10 inches by 25 feet	6.90	207.00
10	8 by 8 inches by 15 feet	3.00	30.00

Annual statement of manufactures and their cost at Watertown Arsenal, etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS X.			
Part 1.			
50	Forgings for block carriers, 3-inch B. L. rifles.....	\$5.50	\$275.00
22	Gas check disk forgings, 5-inch R. F. gun.....	2.25	49.50
15	Gas check disk forgings, 10-inch B. L. rifle.....	7.50	112.50
11	Gas check disk forgings, 12-inch B. L. rifle.....	11.33	124.63
12	Springs for elevating gear 75-mm. gun.....	1.75	21.00
6	Shot trays for 12-inch B. L. rifle (barbette carriage).....	40.36	242.16
8	Steel forgings for 75-mm. R. F. gun.....sets..	138.00	1,104.00
Part 2.			
75-mm. gun carriage:			
1	Elevating arc and rack.....		16.05
1	Wooden shafts.....		14.01
3	Shafts, complete.....pairs..	43.00	129.00
8	Sliding clamp bolts, 15-pounder gun carriage.....	1.35	10.80
4.72-inch A. R. F. gun carriage:			
2	Brackets for electrical firing gear.....	23.31	46.62
2	Brackets attached to carrier for electrical firing gear.....	12.00	24.00
5-inch barbette carriage:			
1	Lifting ratchet lever pawl springs.....		.75
6	Lifting ratchet wheels.....	3.61	21.66
1	Pawl ratchet wheels.....		1.68
26	Gaskets.....sets..	1.50	39.00
2	Lifting ratchet levers.....	49.00	98.00
6-inch barbette carriage:			
Forgings—			
10	Piston rods.....	20.13	201.30
20	Piston-rod nuts.....		
10	Rear cylinder heads.....	28.74	287.40
10	Spring yokes.....	13.00	130.00
20	Spring rods and heads.....	9.13	182.60
10	Friction bands.....	11.70	117.00
10	Steps.....	2.10	21.00
10	Bronze liners for cradle (castings).....	197.45	1,974.50
10	Bronze liners for cradle.....	12.44	124.40
1	Filling piece.....		188.37
6-inch disappearing carriage:			
4	Eyebolts for top carriage.....	2.50	10.00
34	Gaskets.....sets..	.33	12.25
1	Retraction shaft.....		25.50
3	Retraction ropes.....	1.61	4.83
8-inch disappearing carriage:			
36	Gaskets for throttling bar bolts.....	.35	12.60
50	Hand counterweights.....	3.25	162.50
8	Dust-guard bolts.....	1.25	1.00
12	Gaskets, fiber for filling plugs.....	.02	.24
14	Retraction ropes.....	5.82	81.50
2	Traversing crank handles.....	5.15	10.30
1	Wire netting for rear-sight platform.....		7.50
10-inch disappearing carriage:			
12	Filling plugs.....sets..	2.00	24.00
8	Filling plugs with washers.....	.25	2.00
10	Funnels for hydraulic cylinder.....	3.00	30.00
14	Counterweight hooks.....	.78	10.92
12	Gaskets, fiber for filling plugs.....	.02	.24
8	Gaskets, large.....sets..	3.44	27.50
5	Gaskets, small.....do..	3.00	15.00
16	Extractors for stuffing box glands.....	.30	4.84
16	Extractors for cylinder heads.....	.50	8.00
2	Compression grease-cup springs.....	.57	1.14
20	Oil hole plugs.....	.22	4.40
2	Ratchet ball-bearing springs.....	.57	1.14
2	Traversing crank handles.....	5.15	10.30
10	Retraction ropes.....number..	5.40	54.04
2	Retraction ropes (wire).....sets..	14.25	28.49
4	Throttling bar bolts.....set..	2.15	.54
4	Rear stuffing box studs.....sets..	2.15	.54
1	Elevating pointer screws.....set..		1.12
1	Taper pins.....sets..		6.17
1	Taper keys.....do..		10.75
1	Screws for floor plates.....do..		3.25
1	Clamp screw for sight holder.....set..		2.60
1	Dust-guard bolts (72).....sets..	3.50	1.75
3	Platform ladder bolts.....do..	2.75	1.58
1	Bolts for shot trucks.....do..		2.75
4	Rivets for shot trucks.....do..	2.50	.63
1	Extractors for cylinder heads.....do..		1.30
1	Extractors for stuffing boxes.....do..		.92
1	Traversing stop.....do..		5.38

Annual statement of manufactures and their cost at Watertown Arsenal, etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS X—Continued.			
Part 2—Continued.			
10-inch disappearing carriage—Continued.			
1	Elevating stop	set..	\$5.38
1	Crosshead pawl stops	do..	.62
1	Safety latch stop	do..	.75
1	Drain plugs for elevating and traversing bracket		10.50
1	Cable for firing apparatus	set..	1.20
2	Elevating pointer dowels	do..	\$0.68
6	Locking screws for stuffing boxes .....	.35	2.10
6	Spline screws for counter recoil buffers .....	.25	1.50
2	Equalizing pipes	sets..	15.58
12	Washers for equalizing pipes .....	.05	.60
6	Washers for emptying couplings .....	.05	.30
12-inch disappearing carriages:			
12	Extractors for cylinder heads .....	.65	7.80
12	Locking screws for front stuffing boxes .....	.35	4.20
18	Spline screws for counter recoil buffers .....	.25	4.50
30	Bolts for dust guards .....	.15	4.50
2	Equalizing pipes	sets..	16.13
12	Filling plugs with washers .....	.25	3.00
25	Oil-hole plugs .....	.24	6.00
48	Screws for floor plates .....	.03	1.44
1	Counter-balance device, complete		325.63
1	Firing pistol, complete		89.50
2	Counterweight, layers (2 pieces each)	306.25	612.50
1	Lanyard safety attachment		35.80
1	Pawl spring	sets..	4.10
2	Retraction ropes	do..	27.50
2	Retraction ropes	number..	14.25
1	Safety firing switch, complete		94.00
2	Suspension rods (4 each)	sets..	18.75
12	Washers for equalizing pipes .....	.05	.60
6	Washers for emptying couplings .....	.05	.30
1	Cylinder-head extractor	sets..	.75
2	Cylinder-head extractors	number..	.75
12-inch mortar carriage:			
12	Pedestal, cover bolts .....	.25	3.00
10	Screws for indicator plates .....	.10	1.00
4	Hydraulic cylinder brackets	19.04	76.16
1	Pedestal bracket		41.52
1	Racer floor plate		10.45
2	Spring-box brackets	50.00	100.00
1	Steel racer		2,907.53
1	Top carriage		594.00
1	Vertical shaft bracket		10.00
7	Azimuth pointers	2.25	15.75
50	Crank handle pins for securing traversing handle .....	.25	12.50
32	Gaskets for equalizing pipes .....	.10	3.20
22	Pins for traversing crank handles .....	.22	2.64
12	Screws for floor plates .....	.10	1.20
12	Taper pins for traversing crank handles .....	.22	2.64
1	Removable floor plate		7.95
50	Dust guard screws, 8-inch barbette carriage .....	.015	.75
10	Screws for azimuth pointers, 10-inch barbette carriage .....	.20	2.00
12-inch barbette carriage:			
140	Dust guard bolts .....	.05	7.00
1	Projectile crane crank		10.62
1	Wire rope (70 feet by $\frac{3}{8}$ inch)		4.78
1	Crane rope	sets..	6.17
25	Crane ropes	number..	5.00
$\frac{1}{2}$	Dust guard bolts (60)	sets..	1.00
1	Elevating stop	do..	.50
1	Emptying plug	do..	.35
8	Filling plugs with washers .....	.25	2.00
1	Gasket (small)	set..	2.25
2	Gaskets (large)	2.50	5.00
$\frac{1}{2}$	Oil-hole plugs	do..	1.00
$\frac{1}{2}$	Platform ladder bolts	do..	1.00
1	Split (cotter) pins	do..	.50
1	Taper keys	do..	.25
1	Taper pins	do..	2.50
32	Throttling bar bolts with washers .....	.33	10.56
1	Traversing stops	sets..	3.00
50	Washers for throttling bar bolts .....	.10	5.00
44	Dust guard bolts .....	.15	6.60
200	Compression grease cups	5.00	1,000.00
10	Packing extractors	7.73	77.30
4	Packing hooks	6.66	26.64
2	Trunnion chains	8.75	17.50

Annual statement of manufactures and their cost at Watertown Arsenal, etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS X—Continued.			
Part 2—Continued.			
250	Oil plugs, $\frac{1}{2}$ -inch	\$0.17	\$42.50
100	Oil plugs, $\frac{1}{4}$ -inch .....	.20	20.00
150	Oil plugs, $\frac{1}{8}$ -inch .....	.22	33.00
28	Packing hooks for stuffing boxes, gun and mortar carriage.....	6.66	186.48
Part 3.			
20	Bronze handles and screws for rammer staves, 12-inch B. L. rifle ...	2.28	45.60
2	Brass pins for extension rods for sponges, 4.72-inch R. F. gun.....	.05	10
12	Keys with chains attached for sponge staves, B. L. rifle.....	1.25	15.00
1	Long section of sponge and rammer staff, 5-inch B. L. R.....		5.00
1	Staff for special bore sponge, 8-inch B. L. R.....		2.30
1	Staff for special bore sponge (middle section) 12-inch B. L. rifle.....		4.00
Springs for sponge leaves:			
12	8-inch B. L. rifle, bore.....	.19	2.28
12	8-inch B. L. rifle, chamber.....	.19	2.28
44	10-inch B. L. rifle, bore.....	.20	8.80
44	10-inch B. L. rifle, chamber.....	.20	8.80
44	12-inch B. L. rifle, bore.....	.20	8.80
44	12-inch B. L. rifle, chamber.....	.20	8.80
12	12-inch B. L. mortar.....	.20	2.40
1	Sponge for 4.72-inch A. R. F. gun.....		5.50
8	Sponges, woolen, for 5-inch R. F. gun.....	3.25	26.00
Sponge heads:			
3	8-inch B. L. rifle, bore.....	13.20	39.60
3	8-inch B. L. rifle, chamber.....	13.20	39.60
1	10-inch B. L. rifle, bore.....		15.82
1	10-inch B. L. rifle, chamber.....		15.82
4	12-inch B. L. rifle, bore.....	16.00	64.00
4	12-inch B. L. rifle, chamber.....	16.00	64.00
Scale plates:			
4	10-inch B. L. rifle.....	.32	1.28
2	12-inch B. L. rifle.....	.32	.64
8	12-inch B. L. mortar.....	.32	2.56
Sponges, solid heads:			
2	5-inch B. L. rifle, bore.....	5.07	10.14
2	5-inch B. L. rifle, chamber.....	4.03	8.06
2	6-inch R. F. gun, Ordnance Department.....	5.50	11.00
2	Bristle sponge heads, without rods, 15-pounder.....	7.73	15.46
4	Staves for chamber sponges, 8-inch B. L. rifle.....	3.31	13.24
1	Section of sponge and rammer staff, bore 5-inch, B. L. R.....		3.20
Parts 4 and 5.			
21	Fuse plugs, brass, "W" fuse hole, 12-inch mortar shell.....	1.07	22.47
23	Brass bands for 10-inch dummy projectiles.....	6.63	152.49
Part 9.			
6	Cross bars (2 by 6 inch by 10 feet 4 inch) for floating targets.....	.75	4.50
1	Filling piece for ammunition trucks, 10-inch disappearing carriages.....		1.50
50	Handles for ammunition trucks, 8-inch disappearing carriages.....	1.25	62.50
2	Handles for ammunition trucks, 10-inch disappearing carriages.....	1.25	2.50
25	Handles for ammunition trucks, 12-inch disappearing carriages.....	1.21	30.25
62	Handles for ammunition trucks, 12-inch mortar carriages.....	1.44	89.00
1	Elevating gear wheels for shot trucks, 12-inch disappearing carriages.....		8.62
2	Poles for large sling carts.....	15.90	31.80
6	Shoes for garrison gin..... sets.....	5.69	34.14
2	Wheel, caster, for ammunition truck, 12-inch disappearing carriages.....	12.50	25.00
1	Caster and caster wheel, rubber tired, for 10-inch ammunition truck.....		15.50
1	Axle with nuts, complete, 10-inch ammunition truck.....		8.07
3	Caster yokes for ammunition trucks, 10-inch disappearing carriages.....	19.60	58.80
2	Covers for floating targets.....	8.20	16.40
12	Grips and rivets, complete, for ammunition truck handles, 10-inch disappearing carriages..... sets.....	.37	4.44
2	Capstan heads.....	7.80	15.60
For towing targets:			
4	Key pins.....	.06	.24
4	Pins, ridge blocks.....	.12	.48
4	Uprights.....	.37	1.48
1	Tongue for hand sling cart.....		11.75
1	Wheel for large sling cart.....		125.00
Ironmongery.			
32	Anchor plates.....	3.50	112.00
32	Bolts.....		

Annual statement of manufactures and their cost at Watertown Arsenal, etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS X—Continued.			
<i>Ironmongery—Continued.</i>			
1	Bolt, threaded at both ends, with nuts (2 inches by 2 feet).....		\$2.50
2	Iron ($\frac{1}{2}$ by 10 inches by 4 feet).....pieces..	\$0.58	1.16
1	Link (7 by $1\frac{1}{2}$ inch, stock to fit at 2-inch bolt).....		
24	Nails (for targets).....	.095	2.28
<i>Miscellaneous.</i>			
1	Implement chest, 12-inch barbette carriage.....		32.25
<i>Inspecting instruments.</i>			
12-inch disappearing carriage:			
1	Base ring and leveling gauge.....		24.50
1	Cross-head gauge.....		60.00
1	Tool for testing chassis and top carriage.....		60.00
1	Caliper for traversing rack seat.....		30.00
Test tools for 6-inch barbette carriage:			
4	Rack and elevation graduation test gauges.....	a 645.50	2,582.00
4	Pedestal bolt hole gauges.....		
12	Pedestal limit test gauges (3 set).....		
8	Pivot yoke minimum gauges (2 set).....		
4	Pivot yoke limit test gauges.....		
4	Trunnion position test gauges and lining up rod.....		
4	Cradle limit gauges.....		
8	Cylinder alignment gauges.....		
16	Traversing gear limit gauges (4 set).....		
4	Sight gear test bar and caliper.....		
Clinometer rests:			
1	15-pounder.....		12.00
1	6-inch B. L. rifle.....		13.24
1	8-inch B. L. rifle.....		14.75
1	10-inch B. L. rifle.....		14.80
1	12-inch B. L. rifle.....		15.16
<i>Tools and utensils.</i>			
For 4.2-inch A. R. F. gun:			
Spanners—			
2	Piston rod nuts.....	8.94	17.88
2	Piston rod glands.....	9.62	19.24
2	Controlling ram, etc.....	7.74	15.48
2	Elevating arc screws.....	7.74	15.48
2	Guard screws.....	8.94	17.88
2	Cradle lubricators.....	7.74	15.48
2	Sighting gear.....	9.61	19.22
2	Filling measures.....	4.38	8.76
For 6-inch disappearing carriage:			
2	Counterweight hooks.....	.75	1.50
1	Extractor.....		2.35
2	Screw-drivers, steel.....	1.33	2.66
1	Spanner wrench.....		2.00
2	Cylinder head extractors.....	.50	1.00
4	Wrenches for filling plugs.....	1.88	7.50
For 10-inch disappearing carriage:			
6	Box wrenches for filling plugs.....	4.83	29.00
2	Cylinder head extractors.....	.50	1.00
2	Counterweight hooks.....	.75	1.50
1	Extractor.....		.42
1	Spanner wrench.....		3.15
5	Screw-drivers, steel.....	1.40	7.01
1	T screw-driver.....		1.45
2	Tripping bars.....	1.83	3.66
2	Wrenches for piston rods.....	14.60	29.20
1	Wrench for hydraulic cylinder head.....		4.60
For 12-inch disappearing carriage:			
3	Box wrenches for buffer cylinder heads.....	3.17	9.50
6	Counterweight hooks.....	.75	4.50
6	Cylinder head extractors.....	.97	5.80
3	Fork wrenches for filling, vent, and drain plugs.....	2.48	7.45
6	Spanner wrenches for stuffing boxes.....	3.82	22.94
6	Screw-drivers, cross handles.....	2.06	12.38
4	Screw-drivers for traversing rack bolts.....	1.19	4.76
2	Fork wrenches for filling plugs.....	4.60	9.20
1	Fork wrench for piston rod nuts and elevating band trunnion.....		55.25
1	Fork wrench for piston rod nuts.....		30.25
0	Box wrench for buffer cylinder head.....		0.00
3	S hooks.....	.85	2.55

a Per set.

Annual statement of manufactures and their cost at Watertown Arsenal, etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS X—Continued.			
<i>Tools and utensils—Continued.</i>			
	For 12-inch mortar carriage:		
1	Spanner wrench for hydraulic cylinder follower		\$3.50
4	Screw-drivers for floor plates	\$0.50	2.00
1	T screw-driver for floor plates		1.95
	For 8-inch disappearing carriage:		
2	Cylinder head extractors .....	.65	1.30
2	Counterweight hooks .....	.72	1.44
1	Extractor .....		.42
2	T screw-drivers	1.95	3.90
1	Spanner wrench		3.15
1	Screw-driver		2.00
1	Wrench for suspension rod nuts		19.25
1	Wrench for cylinder head and filling plugs		3.75
1	Wrench for stuffing box 8-inch barrette carriage		4.00
	For 10-inch barrette carriage:		
2	Funnels for hydraulic cylinders	2.75	5.50
1	Screw-driver for dust guard .....		.62
1	Wrench for stuffing box		4.00
1	Bar screw-driver (7-inch siege mortar carriage)		1.10
2	Compression bolts (implements 7-inch mortar carriage)	1.55	3.10
2	Tools for alteration of breech 4.72-inch A. R. F. gun	39.44	78.88
2	Tools for alteration of breech 6-inch A. R. F. gun	42.00	84.00
3	Crow bars, 4 feet	1.00	3.00
3	Crow bars, 5 feet	1.10	3.30
2	Crow bars, 6 feet	1.25	2.50
4	Crow bars, 7 feet	1.30	5.20
11	Handles, maul .....	.53	5.78
24	Holdfasts, iron	2.53	60.72
4	Marlin spikes, wood .....	.85	3.40
31	Mauls, metal heads, wood faces	4.42	137.00
2	Straight edges, steel	8.50	17.00
1	Wrench, lever, 24-inch		4.20
2	Wrenches, double "S," 14-inch and 14-inch	6.95	13.90
1	Wrench, spanner, for Hornsby-Akroid engine, 30-horsepower		1.75
	Total		97,313.58

Statement of funds expended at Watertown Arsenal, Mass., during the fiscal year ended June 30, 1903.

Appropriations.	Labor.	Material.	Total.
Ordinance Service, 1902	\$1,914.28	\$408.32	\$2,322.60
Ordinance Service, 1903	16,424.11	8,767.97	25,192.08
Ordinance Stores—Manufacture, etc., 1902	2,996.27	14,773.71	17,769.98
Ordinance Stores—Manufacture, etc., 1903	20,537.35	15,661.36	36,198.71
Ordinance Stores—Preservation, 1902	106.34	501.95	608.29
Ordinance Stores—Preservation, 1903	1,086.16	330.71	1,416.87
Ordinance Stores—Repairs, 1902	21.25	78.76	100.01
Ordinance Stores—Repairs, 1903	2,536.73	84.13	2,620.86
Repairs of Arsenals, 1902	454.54	757.84	1,212.38
Repairs of Arsenals, 1903	3,334.21	4,045.79	7,380.00
Artillery Targets, 1902	303.37	120.33	423.70
Artillery Targets, 1903	1,807.75	2,600.64	4,408.39
Ammunition for Morning and Evening Gun, 1903	25.00		25.00
Manufacture of Arms, 1902-3	10,552.89	4,223.85	14,776.74
Watertown Arsenal:			
No. 3	8.29		8.29
No. 3a	3,749.41	12,322.42	16,071.83
No. 9	1,908.61	4,196.02	6,104.63
No. 12		32.95	32.95
No. 13	307.96		307.96
No. 14	429.93	279.65	709.58
No. 16	11,497.63	741.59	12,239.22
Testing Machine, 1902	207.91	498.72	706.63
Testing Machine, 1903	12,447.85	1,541.76	13,989.61
Board of Ordnance and Fortification	531.95	122.36	654.31
Ordinance Material (Proceeds of Sales)	8,366.77	19,689.32	28,056.09
Armament of Fortifications:			
No. 3	160.36	106.39	266.75
No. 7	3,061.76	479.37	3,541.13
No. 11	177.72		177.72

Statement of funds expended at Watertown Arsenal, etc.—Continued.

Appropriations.	Labor.	Material.	Total.
Armament of Fortifications—Continued.			
No. 17b	\$949.66	\$121.97	\$1,071.63
No. 19		1,560.00	1,560.00
No. 22a	12,443.12	7,650.27	20,093.39
No. 26	479.30		479.30
No. 26b	9,936.72	9,121.73	19,058.45
No. 40	25.82		25.82
No. 40a	2,867.60	303.85	3,171.45
No. 42	96,374.63	113,357.67	209,732.30
No. 47	32,284.38	32,547.70	64,832.08
No. 51a	238.07	24.53	262.60
No. 51c	1,006.09	290.84	1,296.93
No. 51d	1,127.44	2,529.18	3,656.62
No. 55	12,023.64	1,380.46	13,404.10
No. 55a	4,688.75	27,799.01	32,487.76
No. 56	2,478.63	959.11	3,437.74
No. 58	630.66	156.46	787.12
Total	282,509.91	290,168.69	572,678.60

WATERTOWN ARSENAL, MASS., *September 24, 1903.*

Abstract of articles fabricated at Sandy Hook Proving Ground, New Jersey, during the fiscal year ended June 30, 1903.

Quantity.	Articles.	Price.	Amount.
CLASS III.			
<i>Bore sights, wood.</i>			
1	For 6-inch B. L. rifles .....sets..	\$3.00	\$3.00
6	For 8-inch B. L. rifles .....do..	3.00	18.00
4	For 10-inch B. L. rifles .....do..	3.00	12.00
6	For 12-inch B. L. rifles .....do..	3.00	18.00
2	For 12-inch B. L. mortars .....do..	3.00	6.00
<i>Bore sights, brass.</i>			
1	For 12-inch B. L. rifles .....sets..	16.80	16.80
CLASS VIII.			
60	Saluting charges, Du Pont's black saluting powder for 3.2-inch B. L. rifle; charge, 7 ounces each.....	.18	10.80
CLASS X.			
PARTS OF ARTICLES APPERTAINING TO CLASS VIII.			
<i>Cartridge bags, unfilled, silk.</i>			
72	For 3-inch .....	.07	5.04
200	For 3.2-inch .....	.10	20.00
72	For 3.6-inch .....	.11	7.92
1,536	For 5-inch .....	.25	384.00
727	For 6-inch .....	.25	181.75
288	For 7-inch B. L. rifles .....	.26	74.88
432	For 8-inch .....	.40	172.80
360	For 10-inch .....	.81	291.60
766	For 12-inch .....	.85	651.10
42	For 16-inch	1.20	50.40
144	For 12-inch B. L. mortars .....	.63	90.72
Total			2,014.81

Statement of funds expended under each appropriation at Sandy Hook Proving Ground during the fiscal year ended June 30, 1903.

Appropriations.	Amount.
Ordinance Service, 1902	\$4,810.20
Ordinance Stores—Preservation, 1902	38.80
Repairs of Arsenal, 1902	1,449.72
Ordinance Service, 1903	30,832.15
Ordinance Stores—Manufacture, etc., 1903	633.78
Ordinance Stores—Preservation, 1903	9,705.09
Ordinance Stores—Repairs, 1903	3.00
Repairs of Arsenal, 1903	5,152.45
Proving Ground:	
No. 1	10,650.63
No. 2a	6,135.62
No. 12a	9,750.00
No. 14b	500.00
No. 15	48,261.29
No. 16	6,662.50
No. 27b	4,000.00
No. 28	256.11
No. 30	260.26
No. 33	10,657.00
No. 34	1,830.54
No. 35	250.00
No. 35a	1,760.76
No. 36	11,500.00
No. 37	1,600.00
1903, No. 13	1,500.00
Board of Ordnance and Fortification	10,320.88
Ordinance material (proceeds of sales)	7,788.36
Armament of fortifications:	
No. 5	35.53
No. 9a	11,526.67
No. 19	11.72
No. 22a	3,367.55
No. 26	189.52
No. 42	10,658.49
No. 46	31.04
No. 47	591.52
No. 51a	5,474.38
No. 51d	692.24
No. 55	9,362.61
No. 55a	2,381.61
No. 56	58.53
No. 60	11.24
	230,701.79

SANDY HOOK PROVING GROUND, December 16, 1903.

Abstract of articles fabricated at Rock Island Arsenal, Ill., during the fiscal year ended June 30, 1903.

Quantity.	Articles.	Price.	Amount.
CLASS II.			
Artillery carriages.			
2	Carriages, 7-inch howitzer	\$2,225.00	\$4,450.00
6	Combined forges and battery wagons	751.45	4,508.70
8	Artillery store wagons	792.02	6,336.16
4	Platforms, field	89.00	356.00
1	Emergency platforms	70.00	70.00
CLASS III.			
Artillery harness, etc.			
136	For 2 lead horses, N. P., sets, russet	116.94	15,903.84
80	do	149.36	11,948.80
1	Ammunition pack, Colt's automatic guns, caliber .30	144.93	144.93
1	Pack outfit, gun and tripod, Colt's automatic guns, caliber .30	115.12	115.12
1	Pack outfit, gun, tripod, and ammunition, Colt's automatic guns, caliber .30	260.05	260.05
2	Pack saddles, British India	73.74	120.74
		47.00	
31	Pack saddles, Vickers-Maxim 75 mm. guns	28.12	871.72
100	Pack-saddle covers	2.57	257.00
1,806	Harness sacks	4.12	7,440.72

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS III—Continued.			
<i>Paulins.</i>			
15	For 6-pounder R. F. guns	\$21.00	\$315.00
20	For 6-pounder R. F. gun, rampart mount	16.78	335.60
20	For 15-pounder R. F. gun, pillar mount	12.00	240.00
13	For 15-pounder R. F. gun, Driggs-Seabury	10.70	139.10
50	For 4.72-inch and 6-inch R. F. guns	21.50	1,075.00
10	For 5-inch R. F. guns, pillar mount	23.10	231.00
50	Paulins, 6 by 8 feet	4.23	211.50
10	Paulins, 6½ by 13 feet	6.00	60.00
50	Paulins, 8 by 10 feet	6.37	318.50
200	Paulins, 12 by 12 feet	8.53	1,706.00
30	Paulins, 12 by 15 feet	11.98	359.40
<i>Breech covers.</i>			
50	For 12-cm. rifle	1.18	59.00
6	For 15-cm. howitzer	1.75	10.50
27	For 6-pounder R. F. guns	1.27	34.29
20	For 6-pounder R. F. guns, Driggs-Schroeder	1.40	28.00
170	For 15-pounder R. F. guns, Driggs-Seabury	1.55	263.50
8	For 4-inch R. F. guns, Driggs-Schroeder	2.27	18.16
70	For 4.12-inch R. F. guns, Armstrong	2.07	144.90
102	For 5-inch R. F. guns	1.70	173.40
2	For 5-inch R. F. guns, barbette carriage	1.70	3.40
125	For 6-inch R. F. guns, model 1897	1.82	227.50
70	For 6-inch R. F. guns, Armstrong	3.16	221.20
50	For 8-inch rifle, model 1888	4.95	247.50
50	For 8-inch rifle on disappearing carriage	4.95	247.50
50	For 10-inch rifle, model 1895, on disappearing carriage	5.59	279.50
2	For 12-inch rifle, model 1888, on gun-lift carriage	5.25	10.50
1	For 12-inch rifle, on disappearing carriage	6.00	6.00
150	For 12-inch mortar, steel	4.50	675.00
<i>Miscellaneous artillery equipments.</i>			
60	Bristle sponges, 75-mm. Vickers-Maxim guns .....	.55	33.00
25	Brushes and scrapers for 5-inch and 7-inch siege guns	6.90	172.50
1,000	Brushes, cleaning, siege guns .....	.20	200.00
1,000	Brushes, cleaning, seacoast guns .....	.20	200.00
12	Cleaning rods and brushes, for 75-mm. Vickers-Maxim guns .....	.55	6.60
71	Covers for Colt's automatic guns, caliber .30	3.58	254.18
50	Covers for Gatling guns, caliber .30	1.19	59.50
1	Cover for Gatling gun, caliber .45	1.13	1.13
324	Gunners' pouches, siege and seacoast, russet	3.07	994.68
<i>Muzzle covers.</i>			
20	For 24-cm. howitzer	1.29	25.80
20	For 6-pounder R. F. guns, Driggs-Schroeder	2.80	56.00
4	For 6-pounder R. F. guns, Driggs-Seabury	2.80	11.20
70	For 15-pounder R. F. guns, Driggs-Seabury .....	.87	60.90
8	For 4-inch R. F. guns, Driggs-Schroeder .....	.95	7.60
50	For 4.72-inch R. F. guns, Armstrong .....	.41	20.50
2	For 5-inch R. F. guns, barbette carriage	2.65	5.30
102	For 5-inch R. F. guns	2.65	270.20
138	For 6-inch R. F. guns, model 1897	2.55	351.90
50	For 6-inch R. F. guns, Armstrong	2.55	127.50
50	For 8-inch rifle, model 1888 .....	.74	37.00
50	For 10-inch rifle, model 1888	1.03	51.50
50	For 10-inch rifle, model 1895 .....	.95	47.50
50	For 12-inch rifle, model 1888	1.16	58.00
50	For 12-inch rifle, model 1895	1.28	64.00
50	For 12-inch mortar, steel	3.02	151.00
50	For 12-inch mortar, cast iron	1.51	75.50
150	Priming wires, field .....	.99	148.50
25	Rammer heads, 6-pounder .....	.27	6.75
10	Rammer heads, 12-pounder .....	.27	2.70
150	Rammer heads, 3-inch .....	.40	60.00
<i>Sponge covers.</i>			
50	For 6-pounder gun .....	.21	10.50
200	For 12-pounder gun .....	.73	146.00
250	For 3-inch rifle .....	.30	75.00
27	For 15-pounder R. F. gun .....	.28	7.56
100	For 5-inch R. F. gun .....	.33	33.00
50	For 8-inch rifle, bore .....	.63	31.50
50	For 8-inch rifle, chamber .....	.68	34.00
50	For 10-inch rifle, bore .....	.61	30.50
50	For 10-inch rifle, chamber .....	.69	34.50
50	For 12-inch rifle, bore .....	.77	38.50
50	For 12-inch rifle, chamber .....	.85	42.50
90	For 12-inch mortar .....	.72	64.80

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS III—Continued.			
50	Sponges, 6-pounder gun	\$0.48	\$24.00
200	Sponges, 12-pounder gun .....	.60	120.00
250	Sponges, 3-inch rifle .....	.46	115.00
2	Sponges and rammers, 6-pounder gun	1.34	2.68
72	Sponges and rammers, 12-pounder gun	1.65	118.80
94	Sponges and rammers, 3-inch rifle	1.25	117.50
10	Sponge heads, 12-pounder gun .....	.51	5.10
10	Tompions, 6-pounder gun .....	.70	7.00
70	Tompions, 12-pounder gun .....	.70	49.00
50	Tompions, 3-inch rifle .....	.46	23.00
100	Thumbstalls .....	.32	32.00
10	Tube pouches, russet	1.78	17.80
100	Vent covers, field .....	.16	16.00
58	Vent pieces, field	1.80	104.40
55	Vent punches, field .....	.50	27.50
55	Worms and staves, field	4.72	259.60
<i>Equipments for 3.2-inch B. L. rifle.</i>			
161	Breech covers	2.14	344.54
66	Breech sight pouches	2.54	167.64
200	Breech sight pouches, russet	2.54	508.00
76	Combination screw-drivers, axial	1.58	120.08
345	Combined tompons and muzzle covers .....	.99	341.55
31	Canvas bags for lanterns	1.45	44.95
377	Front sight covers .....	.57	214.89
6	Front sight cover springs .....	.05	.30
100	Fuse wrenches, spanner .....	.47	47.00
4	Fuse punches	3.40	13.60
297	Gunner's gimlets	1.30	386.10
204	Gunner's reamers, axial	1.20	244.80
508	Lanyards .....	.81	411.48
421	Maneuvering handspikes .....	.98	412.58
270	Movable hook nuts .....	.08	21.60
524	Movable hook springs .....	.20	104.80
1	Movable hook for sponge and rammer .....	.16	.16
25	Obturator nut wrenches	1.84	46.00
449	Primer pouches, russet	1.59	713.91
34	Prolonges	9.35	317.90
194	Priming wires, axial .....	.52	100.88
100	Rammer heads, bore .....	.29	29.00
300	Sponges, bore .....	.60	180.00
600	Sponges, chamber .....	.57	342.00
367	Sponge covers, bore .....	.18	66.06
608	Sponge covers, chamber .....	.17	103.36
100	Sponge heads, bore .....	.72	72.00
100	Sponge heads, chamber .....	.81	81.00
36	Sponges and rammers, bore	6.00	216.00
0	Sponges and rammers, chamber		
246	Sperm oilers, rectangular .....	.50	123.00
54	Tool boxes, galvanized iron	1.64	88.56
194	Vent punches, axial	1.57	304.58
372	Watering buckets, canvas	1.54	572.88
50	Water buckets, galvanized iron	1.65	82.50
224	Wheel-grease cans	2.15	481.60
209	Wheel-grease-can knives .....	.70	146.30
<i>Equipments for 3.6-inch B. L. rifle.</i>			
30	Breech-sight pouches	2.55	76.50
27	Breech covers	1.15	31.05
30	Combination screw-drivers, axial	1.58	47.40
27	Combined tompons and muzzle covers	1.83	49.41
26	Front-sight covers .....	.56	14.56
26	Gunners' gimlets	1.30	33.80
26	Gunners' reamers	1.20	31.20
18	Priming wires .....	.52	9.36
39	Rammer heads, bore .....	.41	15.99
50	Sponges, bore .....	.62	31.00
100	Sponges, chamber .....	.67	67.00
7	Sponge covers, bore .....	.23	1.61
61	Sponge covers, chamber .....	.25	15.25
48	Sponge heads, bore .....	.13	6.24
48	Sponge heads, chamber .....	.14	6.72
22	Sponges and rammers, bore	6.00	132.00
47	Sponges and rammers, chamber	8.58	403.26
37	Breech covers, Stockett	1.66	61.42
14	Breech covers	1.42	19.88
44	Bar screw-drivers	1.42	62.48

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS III—Continued			
<i>Equipments for 3.6-inch B. L. rifle—Continued.</i>			
22	Breech-sight pouches, russet.....	\$2.45	\$53.90
48	Bronze drifts.....	.75	36.09
22	Canvas tool pouches (cases).....	.85	18.70
22	Cold chisels.....	.55	12.10
24	Cans for axle grease.....	2.50	60.00
22	Extractors for stop in carrier ring.....	1.85	40.70
24	Guard nuts.....	.27	6.48
22	Gunners' gimlets.....	1.35	29.70
23	Gunners' punches.....	.50	11.50
22	Gunners' reamers.....	1.25	27.50
24	Lanyards, 30-foot.....	.83	19.92
22	Leather tool pouches.....	2.50	55.00
24	Mallets.....	.35	8.40
22	Muzzle covers.....	2.91	64.02
48	Maneuvering handspikes.....	3.70	177.60
24	Pin punches.....	.30	7.20
24	Primer keys.....	5.00	120.00
22	Priming wires.....	.90	19.80
22	Rammer heads, bronze.....	2.30	50.60
22	Sponge covers, bore.....	.30	6.60
22	Sponge covers, chamber.....	.32	7.04
24	Sponge heads and sponges, bore.....	2.96	71.04
24	Sponge heads and sponges, chamber.....	.74	17.76
24	Sponge and rammer staves, 2 sections.....	7.90	189.60
22	Shot trays.....	4.10	90.20
24	Sperm-oil cans, $\frac{1}{4}$ gallon.....	1.75	42.00
24	Vaseline cans, $\frac{1}{4}$ gallon.....	1.30	31.20
24	Wrenches, fuse.....	1.37	32.88
22	Wrenches, hydraulic buffer gland.....	7.81	171.82
22	Wrenches, obturator nut.....	3.05	67.10
22	Wrenches, throttling bar screw.....	1.15	25.30
22	Wrenches, vent shield.....	.94	20.68
<i>Equipments for 7-inch B. L. howitzer.</i>			
14	Armament chests.....	66.50	931.00
29	Breech covers, Stockett.....	1.70	49.30
26	Breech covers.....	1.60	41.60
24	Bar screw drivers.....	1.42	34.08
12	Cold chisels.....	.55	6.60
12	Extractor for stop in carrier ring.....	1.85	22.20
12	Gunners' gimlets.....	1.35	16.20
20	Gunner's punches.....	.52	10.40
12	Gunner's reamers.....	1.25	15.00
2	Muzzle covers.....	.50	1.00
24	Priming wires.....	.94	22.56
14	Rammer heads, bronze.....	5.10	71.40
12	Shot trays.....	4.60	55.20
14	Sponge covers.....	.36	5.04
14	Sponge heads and sponges.....	4.40	61.60
12	Sponge and rammer staves, 2 sections.....	8.10	97.20
12	Tompions and muzzle covers.....	3.53	42.36
2	Wrenches, throttling bar screws.....	1.57	3.14
12	Wrenches, vent cover.....	.94	11.28
12	Wrenches, throttling bar and filling plug.....	1.28	15.36
14	Wrenches, cap square screw bolts.....	4.51	63.14
12	Wrenches, front cap of recoil cylinder.....	1.82	21.84
12	Wrenches, rear cap of recoil cylinder.....	1.54	18.48
12	Wrenches, hydraulic buffer gland.....	7.81	93.72
12	Wrenches, obturator nut.....	4.12	49.44
12	Wrenches, recoil-cylinder piston-rod nut.....	6.45	77.40
12	Wrenches, recoil-spring adjusting nut.....	1.66	19.92
12	Wrenches, screw bolts, elevating arc (gear).....	5.11	61.32
<i>Equipments for 3.6-inch B. L. mortars.</i>			
2	Armament chests.....	40.00	80.00
2	Barscrew-drivers.....	1.10	2.20
2	Breech covers.....	1.09	2.18
2	Cold chisels.....	.25	.50
4	Copper drifts.....	.75	3.00
60	Fuse wrenches.....	.99	59.40
2	Gunner's gimlets.....	.24	.48
2	Gunner's reamers.....	.50	1.00
54	Mauls.....	.75	40.50
2	Muzzle covers.....	2.00	4.00
2	Pin punches.....	.28	.56
2	Primer pouches.....	1.53	3.06

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS III—Continued.			
<i>Equipments for 3.6 inch B. L. mortars—Continued.</i>			
2	Priming wires.....	\$0.50	\$1.00
4	Rope slings.....	.33	1.32
2	Screw-drivers.....	.50	1.00
2	Sperm-oil cans.....	1.65	3.30
2	Sponges and rammers.....	1.25	2.50
2	Sponge covers.....	.22	.44
2	Vaseline cans.....	1.30	2.60
2	Vent punches.....	1.57	3.14
2	Wrenches, obturator nut.....	7.40	14.80
50	Breech covers.....	1.22	61.00
10	Breech sights.....	12.44	124.40
13	Bristle sponges.....	.77	10.01
16	Cleaning brushes.....	.55	8.80
19	Haversacks.....	2.68	50.92
50	Tompions.....	.28	14.00
<i>Equipment for Hotchkiss mountain guns, caliber 3-inch.</i>			
92	Brake ropes.....	15.90	1,462.80
12	Cleaning brushes.....	.55	6.60
12	Drag ropes.....	14.99	179.88
10	Drifts.....	.68	6.80
12	Oil cans.....	.84	10.08
10	Screw-drivers.....	1.43	14.30
15	Sponges and staves.....	3.98	59.70
15	Sponge covers.....	.98	14.70
CLASS VII.			
<i>Infantry equipments.</i>			
141	Officer's saber belts and plates, black.....	2.48	349.68
109	Officer's saber belts and plates, russet.....	2.53	275.77
1,512	Officer's saber belts with buckles, russet.....	2.00	3,024.00
1	Officer's saber belt with buckles, black.....	2.00	2.00
45	Dispatch cases, russet.....	9.62	432.90
2	Emergency cases, russet.....	22.86	45.72
2	Pouches, russet, field operating cases.....	4.47	8.94
1	Service belt, russet, officer's, Signal Corps.....	2.15	2.15
24	Reconnaissance pouches, russet.....	.98	23.52
1,000	Blanket bags.....	1.03	1,030.00
1,000	Blanket-bag coat straps, russet.....	.51	510.00
1,000	Blanket-bag shoulder straps, russet.....	.52	520.00
4,190	Blanket-roll straps, russet.....	.40	1,676.00
144,893	Canteens.....	.33	47,814.69
1,000	Canteens, without "U. S.".....	.33	330.00
188,600	Canteen-haversack straps, russet.....	.59	111,274.00
13,000	Canteen corks and chains.....	.03	390.00
10,000	Cartridge-belt plates.....	.19	1,900.00
2,000	Cartridge boxes, McKeever, caliber .30, russet.....	1.30	2,600.00
500	Cartridge boxes, McKeever, U. S. M. C.....	1.07	535.00
2	Canvas belts with pockets.....	23.85	47.70
177,246	Gunslings.....	.43	76,215.78
96,602	Haversacks.....	.87	84,043.74
88,402	Meat cans.....	.19	16,796.38
1,000	Meat cans, aluminum.....	.44	440.00
80,002	Tin cups.....	.10	8,000.20
1,000	Cups, aluminum.....	.23	230.00
120,002	Spoons.....	.02	2,400.04
2	Knives.....	.04	.08
2	Forks.....	.04	.08
513	Shoulder belts, russet.....	1.05	538.65
2,025	Sliding frogs, black.....	.24	486.00
879	Sliding frogs, russet.....	.25	219.75
2,075	Waist belts, black leather.....	.42	871.50
728	Waist belts, russet.....	.45	327.60
12	Waist belts, russet, with clip pockets.....	3.80	45.60
36	Waist belts with buckles, black.....	.52	18.72
23,410	Waist belts with buckles, russet.....	.60	14,046.00
600	Waist belts, russet, officer's.....	.74	444.00
2,312	Waist-belt plates.....	.41	947.92
416	Waistbelt plates, N. C. O.....	.41	190.56
100	Sheaths for pick mattocks, russet.....	.83	83.00
<i>Cavalry equipments.</i>			
1	Canteen strap, black.....	.21	.21
483	Canteen straps, russet.....	.25	120.75
3,800	Cartridge boxes, revolver, caliber .38, russet.....	.62	2,356.00

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS VII—Continued.			
<i>Cavalry equipments—Continued.</i>			
50	Cartridge boxes, revolver, caliber .45, russet	\$0.67	\$33.50
400	Carbine slings, engineer model .....	.69	276.00
26	Holsters for Colt's automatic pistols, caliber .38 .....	.90	23.40
2	Leggings, pairs, russet	1.22	2.44
218	Leggings, pigskin	6.10	1,329.80
77	Leggings, collar leather	4.40	338.80
15	Leggings, bag leather	4.15	62.25
1	Pistol holster, Luger, russet .....	.88	.88
17	Revolver lanyards, russet .....	.26	4.42
1	Revolver holster, caliber .38, black .....	.83	.83
20,100	Revolver holsters, caliber .38, russet .....	.95	19,095.00
3	Revolver holsters, caliber .45, russet, 5½-inch barrel .....	.95	2.85
1	Revolver holster, caliber .45, russet, 7¼-inch barrel .....	.95	.95
2	Revolver holsters, caliber .45, russet, L. B. ....	.95	1.90
30	Revolver holsters, caliber .45, black .....	.95	28.50
9,623	Saber knots, russet .....	.52	5,003.96
635	Saber knots, russet, officer's .....	.57	361.95
0	Saber knots, officer's black		
2	Saber knots, black .....	.50	1.00
111	Saber belts, russet .....	.54	59.94
50	Saber belts, black .....	.50	25.00
18,399	Saber belts with buckles, russet .....	.69	12,695.31
19,838	Saber attachments, russet .....	.35	6,943.30
40,002	Spurs .....	.37	14,800.74
30,002	Spur straps, russet .....	.14	4,200.28
7,502	Spur straps, black .....	.11	825.22
550	Spurs, box	2.20	1,210.00
6	Officer's spurs with black straps	1.38	8.28
1,751	Officer's spurs with russet straps	1.38	2,416.38
12	Cords for pistols	1.72	20.64
102	Pistol lanyards	1.89	192.78
1,405	Spur straps, black, officer's .....	.26	365.30
200	Spur straps, russet, officer's .....	.26	52.00
<i>Artillery equipments.</i>			
1,002	Knapsacks	3.51	3,517.02
<i>Horse equipments.</i>			
6,099	Curb bits, model 1892	1.45	8,843.55
377	Curb bits, model 1892, for double reins	1.57	591.89
1	Curb bit, model 1892, upper branches lengthened	1.40	1.40
1,400	Curb bits, Pelham	2.25	3,150.00
2	Cavalry equipment bags	2.14	4.28
8,017	Lariats .....	.71	5,692.07
1,000	Picket pins, cross section .....	.38	380.00
12	Picket pins .....	.36	4.32
1,000	Picket pins, hollow .....	.41	410.00
501	Saddle cloths, dress	4.40	2,204.40
558	Saddle cloths, field	3.25	1,813.50
200	Saddle cloths, blue, enlisted men	2.14	428.00
200	Saddle cloths, khaki, enlisted men	1.22	244.00
70	Stirrups, steel	1.00	70.00
12	Stirrups, wooden .....	.30	3.60
<i>Horse equipments, black leather.</i>			
1	Breast strap, officer's	6.70	6.70
919	Bridle headstalls	1.18	1,084.42
759	Bridle reins .....	.87	660.33
1	Curb chain and safe .....	.50	.50
1,000	Carbine scabbards	2.24	2,240.00
2,056	Coat straps for saddles .....	.12	246.72
4,650	Currycombs .....	.20	930.00
178	Curb straps .....	.35	62.30
2,000	Girth or cincha straps .....	.25	500.00
100	Halter straps with covert snaps .....	.65	65.00
2,800	Halter straps .....	.41	943.00
1	Horse brush .....	.94	.94
4,000	Horse covers	2.76	11,040.00
5	Housings	27.11	135.55
23	Hair girths or cinchas	1.31	30.13
1	Nosebag	1.01	1.01
1	Quarter strap, self-adjusting	1.92	1.92
2,250	Surcingle, cavalry .....	.69	1,552.50
52	Stirrup straps .....	.57	29.64
2	Stirrups with hood and socket for guidon	1.56	3.12

Abstract of articles fabricated at Rock Island Arsenal, IH., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS VII—Continued.			
<i>Horse equipments, russet.</i>			
9	Breast straps, officer's	\$6. 95	\$62. 55
35	Breast straps, officer's, hunting design	2. 25	78. 75
13,553	Bridle headstalls	1. 47	19,322. 91
11,632	Bridle reins .....	. 88	10,236. 16
26,535	Curb chains and safes .....	. 50	13,267. 50
526	Curb straps .....	. 38	199. 88
32,195	Bridles, watering	1. 33	42,819. 35
1,000	Bridles, watering, special	1. 54	1,540. 00
10,247	Carbine scabbards	2. 80	28,691. 60
25,230	Coat straps .....	. 15	3,784. 50
156	Combination halter-bridles	6. 62	1,032. 72
41	Cruppers, cavalry	1. 19	48. 79
14,378	Currycombs .....	. 20	2,875. 60
6,400	Girth or cincha straps .....	. 40	2,560. 00
6,330	Hair cinchas	1. 48	9,368. 40
600	Hair cinchas, Texas saddles	1. 20	720. 00
15,250	Halter headstalls	1. 89	28,822. 50
21,967	Halter straps .....	. 49	10,763. 83
16,000	Horse brushes .....	. 97	15,520. 00
4,002	Horse covers	2. 76	11,045. 52
1,075	Headstalls, combination halter-bridle	2. 80	3,010. 00
2,104	Horse covers, blanket lined	5. 57	11,719. 28
24,028	Lariat straps .....	. 11	2,643. 08
20,000	Links .....	. 30	6,000. 00
25,999	Nosebags	1. 04	27,038. 96
5,020	Quarter straps, self-adjusting	2. 12	10,642. 40
150	Reefing straps, long	1. 18	177. 00
150	Reefing straps, off .....	. 80	120. 00
27,212	Saber straps .....	. 15	4,081. 80
11,927	Saddles	16. 26	193,933. 02
130	Saddles, Whitman	16. 77	2,180. 10
12	Saddles, De Thierry	25. 75	309. 00
28,290	Saddlebags	5. 90	166,911. 00
42	Stirrups, leather covered	1. 60	67. 20
3,000	Stirrup hoods .....	. 72	2,160. 00
20,653	Surcingles, cavalry .....	. 76	15,696. 28
29	Sweat leathers, pairs	1. 62	46. 98
5,476	Stirrups, hooded .....	. 92	5,037. 92
144	Stirrups, hooded, with guidon socket	1. 88	270. 72
328	Saddle covers	1. 14	373. 92
5,000	Stirrup straps .....	. 71	3,550. 00
1,000	Surcingles, artillery .....	. 85	850. 00
100	Stirrups and sweat leathers, pairs	5. 20	520. 00
12	Horse equipments, foreign model, sets	210. 00	2,520. 00
CLASS VIII.			
AMMUNITION.			
<i>Blank cartridges.</i>			
20,000	For 3-inch rifle, 1-pound charge .....	. 24	4,800. 00
12,000	For 3.2-inch rifle, 1½-pound charge .....	. 30	3,600. 00
1,000	For 3.6-inch rifle, 1½-pound charge .....	. 30	300. 00
1,000	For 6-pounder gun, 1-pound charge .....	. 24	240. 00
10,000	For 12-pounder gun, 1½-pound charge .....	. 40	4,000. 00
<i>Cartridge bags.</i>			
45,000	For 3-inch rifle	a, .02	900. 00
15,000	For 12-pounder gun, 1½-pound charge .....	. 02	300. 00
2,000	For 3.6-inch rifle, 1½-pound charge .....	. 02	40. 00
1,000	For 7 inch howitzer, 3-pound charge .....	.045	45. 00
2,000	For 6-pounder gun, 1-pound charge .....	. 02	40. 00
10,000	For 3.2-inch rifle, 1½-pound charge .....	. 02	200. 00
<i>Dummy cartridges.</i>			
8	For 10-inch rifle	11. 25	90. 00
12	For 12-inch rifle	16. 40	196. 80
173	For 12-inch mortar	5. 20	899. 60
CLASS IX.			
<i>Laidley targets, and parts for same.</i>			
50	Laidley targets, 6 by 6 feet, horizontal axis	13. 98	699. 00
100	Laidley targets, 6 by 6 feet, vertical axis	10. 11	1,011. 00
100	Laidley targets, 6 by 12 feet, vertical axis	16. 73	1,673. 00

a For labor.

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS IX—Continued.			
<i>Laidley targets, and parts for same—Continued.</i>			
300	Frames, 6 by 6 feet	\$0.96	\$288.00
14	Pulleys and cords .....	.16	2.24
28	Springs for spring blocks .....	.12	3.36
25	Top supports, 6 by 6 feet	1.25	31.25
15	Top supports, 6 by 12 feet	1.98	29.70
100	Bolts for slide rods .....	.06	6.00
245	Bolts, 5½ inches long .....	.06	14.70
200	Bolts, 6½ inches long .....	.06	12.00
4	Braces .....	.17	.68
4	Cross sills .....	.52	2.08
30	Corner braces .....	.35	10.50
192	Fastening hooks .....	.15	28.80
900	Frames, 6 by 6 feet	1.02	918.00
180	Frames, 6 by 12 feet	2.16	388.80
27	Main sills .....	.76	20.52
30	Nuts for slide rods .....	.10	3.00
50	Pulleys and fittings	1.10	55.00
4	Posts .....	.73	2.92
700	Sash cord clamps .....	.60	420.00
2	Slide rods	1.28	2.56
40	Slide irons .....	.11	4.40
20	Stay rods and eyebolts, 6 by 6 feet	2.22	44.40
4	Stay rods and eyebolts, 6 by 12 feet	2.34	9.36
52	Top beams, 6 by 6 feet .....	.62	32.24
18	Wooden carriage frames, 6 by 6 feet	2.15	38.70
4	Wooden carriage frames, 6 by 12 feet	3.21	12.84
<i>Rolling targets and parts.</i>			
180	Frames, 6 by 6 feet	1.44	259.20
200	Horizontal rails, 6 by 12 feet .....	.28	56.00
100	Rear braces .....	.08	8.00
25	Track, pieces	6.70	167.50
200	Vertical rails .....	.28	56.00
<i>Miscellaneous targets and parts.</i>			
65	Artillery land targets	8.58	557.70
104	Texas targets	16.59	1,725.36
200	Covers for artillery land targets	3.28	656.00
50	Covers for floating or towing targets	5.44	272.00
24	Frames, 4 by 6 feet, for Texas targets	1.06	25.44
96	Frames, 6 by 6 feet, for Texas targets	1.24	119.04
900	Light interior frames, 4 by 6 feet .....	.40	360.00
1,220	Light interior frames, 6 by 6 feet .....	.40	488.00
50	Gallery targets, 50-foot range	2.39	119.50
100	Gallery targets, 75-foot range	2.39	239.00
100	Marking disks and staves, short range .....	.51	51.00
100	Marking disks and staves, mid range .....	.82	82.00
23,000	Pasters, white, boxes .....	.05	1,150.00
17,000	Pasters, black, boxes .....	.05	850.00
120,000	Pasters, black, artillery	M	62.40
2,000	Pasters, black, artillery, boxes .....	.52	1,040.00
71,900	Paper targets, "A," model 1897 .....	.03	2,157.00
70,050	Paper targets, "B," model 1897 .....	.035	2,451.75
50,150	Paper targets, "A," model 1903 .....	.035	1,755.25
60,350	Paper targets, "B," model 1903 .....	.04	2,414.00
25,075	Paper targets, "C," model 1903 .....	.07	1,755.25
30,650	Paper targets, "F," model 1903 .....	.04	1,226.00
70,550	Paper targets, "K," model 1903 .....	.035	2,469.25
27,000	Paper targets, "X," model 1903	C .51	137.70
27,000	Paper targets, "Y," model 1903	C .55	148.50
27,000	Paper targets, "Z," model 1903	C .76	205.20
14,800	Paper targets, "B," elliptical .....	.035	518.00
5,000	Paper targets, "B," elliptical, reduced .....	.014	70.00
36,600	Paper silhouettes, "D" .....	.015	549.00
8,240	Paper silhouettes, "E" .....	.0075	61.80
2,000	Paper silhouettes, "K-a" .....	.02	40.00
1,000	Paper silhouettes, "M" .....	.02	20.00
1,000	Paper silhouettes, "N" .....	.02	20.00
91,760	Paper silhouettes, "H," model 1903 .....	.02	1,835.20
150,120	Paper silhouettes, "D," model 1903 .....	.01	1,501.20
150,240	Paper silhouettes, "E," model 1903 .....	.01	1,502.40
25,000	Paper silhouettes, "M," model 1903 .....	.02	500.00
32,500	Paper silhouettes, "N," model 1903 .....	.025	812.50
6,500	Paper silhouettes, "O," model 1903 .....	.025	162.50
6,500	Paper silhouettes, "P," model 1903 .....	.025	162.50
2,320	Cloth silhouettes, "K-a" .....	.30	696.00
600	Cloth silhouettes, "M," model 1903 .....	.39	234.00

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS IX—Continued.			
<i>Miscellaneous targets and parts—Continued.</i>			
3,780	Cloth silhouettes, "N," model 1903.....	\$0.26	\$982.80
1,900	Cloth silhouettes, "O," model 1903.....	.35	665.00
1,900	Cloth silhouettes, "P," model 1903.....	.31	589.00
660	Rivets for steel-target frames.....	.02	13.20
<i>Miscellaneous articles for Army use.</i>			
1,355	Gunnery's badges.....	.78	1,056.90
147	Silver bars for sharpshooters' badges.....	.47	69.09
903	Sharpshooters' badges.....	1.00	903.00
530	Marksmen's buttons.....	.10	53.00
1,000	Marksmen's pins.....	.50	500.00
1,500	Danger flags.....	.65	975.00
1,000	Ricochet flags.....	.67	670.00
400	Streamers.....	4.60	1,840.00
10	Covers for range finders.....	2.20	22.00
8	Tripods for siege guns.....	49.10	392.80
100	Masks.....	3.55	355.00
100	Plastrons.....	4.00	400.00
100	Right-hand gloves.....	2.20	220.00
30	Single sticks.....	.30	9.00
250	Wooden sabers.....	.80	200.00
500	Wooden saber blades.....	.36	180.00
CLASS X.			
<i>Parts for 3.2-inch carriages.</i>			
50	Attachment sockets for bow-spring brakes.....	5.38	269.00
21	Axle seat guard rails.....	4.95	103.95
14	Axle seat guard rail hinge pins.....	.14	1.96
14	Axle seat guard rail hinge pin nuts.....	.07	.98
20	Axle seat reenforce plates.....	.24	4.80
54	Axle seat rivets.....	.318	17.17
311	Axle seat standards.....	3.59	1,116.49
80	Assembling bolts for lazy tongs.....	1.80	144.00
6	Assembling bolt washers.....	.25	1.50
179	Breech straps.....	1.12	200.48
50	Breech strap eye washers.....	1.15	57.50
50	Bow-spring brakes.....	28.50	1,425.00
180	Bow springs for bow-spring brakes.....	4.53	815.40
24	Brake shoes for bow-spring brake.....	3.43	82.32
27	Clevis bolts and nuts.....	.46	12.42
150	Clevises for bow-spring brake.....	5.49	823.50
50	Crank handles, lazy tongs.....	4.19	209.50
12	Crank handles, double screw.....	4.19	50.28
3	Crank handle pins.....	.23	.69
56	Crossheads, double screw elevating device.....	5.15	288.40
50	Crosshead elevating nuts.....	3.14	157.00
1	Crosshead bearings, right.....	6.67	6.67
2	Crosshead bearing nuts.....	.10	.20
50	Eyebolt keys and chains.....	.89	44.50
50	Elevating screws.....	8.80	440.00
14	Elevating devices, double screw.....	89.50	1,253.00
50	Elevating screw nuts.....	.83	41.50
50	Elevating screw nut pins.....	.17	8.50
50	Elevating screw washers.....	.33	16.50
2	Forks, double screw elevating device.....	9.50	19.00
2	Guard rail rivets.....	.10	.20
1	Guard rail latch.....	1.04	1.04
700	Horizontal gear feather keys.....	.65	455.00
50	Horizontal gear feather key screws.....	.15	7.50
30	Horizontal gear semicircular key screws.....	.15	4.50
1,104	Linchpins, Rock Island Arsenal.....	1.53	1,689.12
450	Linch washers.....	.79	355.50
186	Locking levers, bowspring brake.....	11.33	2,309.40
5	Locking-lever bolts and nuts.....	.93	4.65
2	Locking-lever-bolt nuts.....	.11	.22
57	Lunette wearing shoes.....	8.32	474.24
24	Lunette wearing-shoe rivets.....	.12	2.88
4	Lower brackets.....	2.11	8.44
4	Lower bracket-screw bolts.....	.52	2.08
1,585	Leather washers.....	.05	79.25
56	Rear fork pivot bolts.....	.37	20.72
76	Rear fork pivot-bolt nuts.....	.07	5.32
24	Rivets for top of lunette.....	.034	.82
3	Side lever eyebolts and nuts.....	.93	2.79
1	Toggles, sponge and rammer.....	1.70	1.70

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS X—Continued.			
<i>Parts for 3.2-inch carriages—Continued.</i>			
1	Trail box lid	\$3.50	\$3.50
24	Trail plate rivets .....	.10	2.40
15	Trail handspike pins .....	.45	6.75
10	Trail handspikes	33.50	335.00
<i>Parts for 3.2-inch caissons.</i>			
100	Attachment rods, bolts, and nuts for lever road brake .....	.13	13.00
4	Ax and spade boards	1.35	5.40
150	Brake frames, lever road brake	7.10	1,065.00
100	Brake rods, lever road brake	3.67	367.00
300	Brake shoes, lever road brake	1.77	531.00
4	Brake-lever bolts and nuts	1.10	4.40
100	Handspike attachment key bolts .....	.21	21.00
40	Lever road brakes, pairs	94.97	3,798.80
12	Lever stop rivets .....	.88	10.56
25	Lunette prop attachments	9.33	233.25
53	Pickax attachments, middle rails	4.94	261.82
13	Pickax attachments, side rail .....	.42	5.46
27	Pickax catch springs	3.74	100.98
12	Ratchet piece rivets .....	.04	.48
115	Spare pole attachment key bolts and chains	4.14	476.10
25	Spare wheel-axle toggles and chains .....	.85	21.25
25	Sledge-hammer attachments	8.60	215.00
106	Spring-assembling bolts and nuts	1.06	112.36
100	Springs for lever road brakes	1.85	185.00
3	Spare pole attachment key bolts	3.88	11.64
3	Spare pole attachments	4.75	14.25
<i>Parts for 3.2-inch limbers.</i>			
100	Ammunition-chest covers .....	.50	50.00
614	Ammunition-chest bolts and nuts .....	.47	288.58
200	Cushions, canvas	6.69	1,338.00
20	Doubletree bolts and straps	7.78	155.60
112	Doubletree bolt nuts .....	.08	8.96
50	Doubletrees	7.05	352.50
1	Doubletree bolt braces	7.43	7.43
12	Doubletree and hooks	1.65	19.80
8	Footboard-strap hinge pins .....	.16	1.28
2	Hasps for ammunition chests	2.07	4.14
91	Lid props	3.07	279.37
50	Lid-prop plates .....	.34	17.00
112	Lid-prop brackets .....	.42	47.04
12	Lid-prop-strap hinge pins .....	.10	1.20
120	Lid prop supporting thimbles .....	.07	8.40
50	Neck yokes	7.65	382.50
125	Neck yoke pads .....	.38	47.50
6	Neck yoke pads, russet .....	.42	2.52
1	Neck yoke stop with hinge eye	3.16	3.16
1	Obturator and primer box	3.62	3.62
33	Packing divisions, wood .....	.38	12.54
18	Packing divisions, wood, halves .....	.18	3.24
4	Pintles	17.52	70.08
35	Pintle keys and chains	3.88	135.80
46	Poles	12.05	554.30
7	Pole bolts	2.75	19.25
10	Pole covers .....	.98	9.80
1	Pole ferrule	1.19	1.19
350	Pole pads	1.45	507.50
125	Pole props	7.87	983.75
100	Pole prop eye rivets .....	.09	9.00
131	Pole prop keys and chains	1.82	238.42
6	Pole prop key rivets .....	.48	2.88
110	Pole prop key bolts and nuts .....	.73	80.30
100	Pole prop key latch hooks .....	.08	8.00
104	Primer box lid chains .....	.08	8.32
144	Rivets for footboard hinges .....	.0025	.36
6	Supporting brackets	1.18	7.08
250	Singletrees	2.67	667.50
33	Staples for padlocks .....	.15	4.95
75	Turn-buckles for ammunition chests	3.14	235.50
<i>Parts for 5-inch carriages.</i>			
7	Brake shoes with levers	30.78	215.46
25	Poles, siege	8.75	218.75
24	Wearing blocks	2.49	59.76

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS X—Continued.			
<i>Parts for miscellaneous carriages.</i>			
2	Brake shoes, artillery store wagon	\$0.41	\$0.82
1	Clinch plate for 3-inch howitzer .....	.78	.78
50	Handspikes, model 1890	10.50	525.00
3	Hinge pins, apron, machine gun carriage .....	.17	.51
24	Linch pins, $\frac{3}{4}$ inch round	1.04	24.96
1	Rack for battery wagon	11.05	11.05
5	Tool chests, carpenters'	29.45	147.25
5	Tool chests, saddlers'	22.00	110.00
7	Whip sockets for artillery store wagon .....	.85	5.95
<i>Parts for artillery harness.</i>			
99	Back straps for breechings	3.00	297.00
20	Back straps and cruppers	2.76	55.20
8	Back straps and cruppers, russet	3.00	24.00
25	Breast straps .....	.73	18.25
57	Breechings	6.68	380.76
30	Breeching bodies	2.47	74.10
200	Bridle ornaments .....	.003	.60
100	Bridle headstalls, russet	1.36	136.00
6	Bridle reins, russet	1.02	6.12
100	Bridle reins, black .....	.80	80.00
25	Breast straps, russet	1.55	38.75
50	Coupling straps, russet .....	.75	37.50
40	Collar straps .....	.58	23.20
100	Curb straps, russet .....	.86	86.00
50	Collar pads, canvas	1.52	76.00
20	Cruppers	1.14	22.80
100	Foot staples, iron, low .....	.0111	1.11
100	Foot staples, iron, high .....	.0111	1.11
108	Foot staples, iron, semicircular .....	.017	1.84
350	Hair cinchas, wheel	1.68	588.00
4	Hair cinchas, wheel, russet	1.35	5.40
289	Hooks for back straps .....	.25	72.25
543	Hooks for side straps .....	.25	135.75
269	Hooks for breast straps .....	.26	69.94
963	Lead rein rollers .....	.28	269.64
97	Lead rein-roller straps .....	.19	18.43
100	Leg guards, black	2.29	229.00
10	Leg guards, russet	2.25	22.50
72	Links for traces .....	.16	11.52
25	Martingales, black	3.20	80.00
25	Martingales, russet	3.78	94.50
85	Open links .....	.08	6.80
6	Side straps, russet	1.06	6.36
500	Traces, lead	5.13	2,565.00
100	Traces, lead, russet	5.43	543.00
200	Traces, wheel	4.08	816.00
100	Traces, wheel, russet	4.08	408.00
262	Trace chains, lead	2.36	618.32
20	Trace chains, wheel, with Mogul springs	6.30	126.00
1,000	Whips	2.89	2,890.00
862	Whips, russet	3.04	2,620.48
<i>Parts for packing outfits.</i>			
70	Ammunition boxes, Vickers-Maxim guns, caliber 75 mm	1.91	133.70
30	Ammunition hangers, Vickers-Maxim guns, caliber 75 mm	9.97	299.10
24	Brake ropes, Vickers-Maxim 75 mm. guns.	3.10	74.40
725	Corrugated iron cases for Hotchkiss ammunition, caliber 1.65-inch	1.03	746.75
6	Drag-ropes sets, 75 mm. Vickers-Maxim guns	11.98	71.88
30	Hair cinchas, 75 mm. Vickers-Maxim guns	3.01	90.30
12	Pads for trail, 75 mm. Vickers-Maxim guns	2.31	27.72
36	Snaffle bits, 75 mm .....	.40	14.40
12	Tool boxes	3.73	44.76
24	Traces	1.97	47.28
<i>Parts for equipments.</i>			
Parts for officer's saber belts:			
51	Buckles .....	.10	5.10
1	Hook attachment .....	.14	.14
51	Metal parts .....	.95	48.45
102	Saber-attachment hooks .....	.35	35.70
103	Slides .....	.11	11.33
302	Snap hooks .....	.40	120.80
21	Saber attachments, russet	1.29	27.09
89	Slides with hooks .....	.25	22.25
100	Sling buttons .....	.03	3.00
10	Saber attachments, black	1.25	12.50

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
CLASS X—Continued.			
<i>Parts for equipments—Continued.</i>			
800	Brass slides for cavalry saber belt.....	\$0.09	\$72.00
100	Brass wire loops for saber attachment.....	.02	2.00
5,000	Brass wire squares, $\frac{1}{4}$ -inch.....	.01	50.00
10,000	Brass wire "D" rings.....	.01	100.00
8,000	Brass wire double hooks.....	.011	88.00
8,000	Brass wire loops.....	.02	160.00
100	Buttons for cartridge boxes.....	.18	18.00
256	Buckles for officer's spur straps.....	.12	30.72
2,437	Hasps for waist-belt plates.....	.05	121.85
100	Loops for B. B. coat straps.....	.02	2.00
25	Loops for B. B. shoulder straps.....	.03	.75
25	Loops for haversack straps.....	.04	1.00
25	Loops for waist belts.....	.025	.63
50	Metal parts for shoulder belts.....sets..	.30	15.00
<i>Parts for horse equipments.</i>			
50	Bits for watering bridle, without snap.....	.39	19.50
1,152	Bits for watering bridle.....	.60	691.20
2,200	Bridle ornaments.....	.03	66.00
6,258	Brass end hooks for links.....	.008	500.64
1	Brow band, russet.....	.11	.11
1	Brow band, russet, with brass rosettes.....	1.57	1.57
2,000	Brass foot staples, high.....	.02	40.00
2,000	Brass foot staples, low.....	.02	40.00
6,004	Brass foot staples, semicircular.....	.02	120.08
250	Check pieces, russet.....	.34	85.00
1	Crown piece, russet.....	.20	.20
16	Coats of arms.....	3.00	48.00
3	Covering, russet leather, for saddletrees.....	2.15	6.45
30	Curb chain hooks.....	.04	1.20
1	Covers for saddles and stirrups, russet.....set..	3.65	3.65
2,004	Double snap hooks for watering bridles.....	.06	120.24
4,000	Double snap hooks for lariats.....	.04	160.00
114	Figures for saddlecloths.....	.02	2.28
2,000	Guard plates for saddlebags.....	.0085	17.00
3,000	Guard plates for saddles.....	.01	30.00
300	Guard plates for saddlebag studs.....	.01	3.00
1,962	Halter chains.....	.30	588.60
251	Halter chains with covert snaps.....	.60	150.60
568	Insignia.....pairs..	1.40	795.20
12	Leather trimmings for saddlecloths.....sets..	1.00	12.00
1	Metal trimmings for saddlebags.....	.20	.20
16	Metal trimmings for officers' bridles.....	.50	8.00
1	Metal trimmings for officers' halter bridles.....	.50	.50
203	Metal trimmings for officers' saddles.....	1.00	203.00
100	Open links for halter chains.....	.04	4.00
4	Ornaments, aid-de-camp.....	.56	2.24
9	Rosettes, bronze, pairs.....	1.38	12.42
282	Rosettes, metal, officers'.....	.10	28.20
32	Stars, metal, officers'.....	.74	23.68
300	Reins for watering bridles, russet.....	.75	225.00
5,000	Rings, $\frac{1}{2}$ inch.....	.03	150.00
2,000	Rings, $\frac{3}{4}$ inch.....	.035	70.00
1,000	Rings, 4 inch.....	.04	40.00
4	Rings, $\frac{1}{4}$ inch.....	.007	.03
28	Side straps for saddlebags, russet.....	.27	7.56
2,000	Straps for carbine scabbards, russet, short.....	.27	540.00
2,000	Straps for carbine scabbards, russet, long.....	.34	680.00
2,000	Saddlebag studs.....	.025	50.00
6,000	Shields for saddles.....	.01	60.00
50	Snaps for halter chains.....	.50	25.00
3,000	Snaps for watering bridles.....	.06	180.00
100	Toggles for halter chains.....	.07	7.00
PART II.			
<i>Ironmongery.</i>			
154	Buckles, bar, bronze, $\frac{3}{4}$ inch.....	.04	6.16
304	Buckles, bar, bronze, $\frac{3}{4}$ inch.....	.04	12.16
104	Buckles, bar, bronze, $\frac{3}{4}$ inch.....	.05	5.20
21,000	Buckles, bar, brass, $\frac{3}{4}$ inch.....	.035	735.00
3,500	Buckles, bar, brass, $\frac{3}{4}$ inch.....	.035	122.50
2,000	Buckles, bar, brass, $\frac{3}{4}$ inch.....	.04	80.00
2,000	Buckles, bar, brass, $\frac{3}{4}$ inch, Saalbach.....	.035	70.00
6,000	Buckles, brass wire, $\frac{3}{4}$ inch.....	.01	60.00

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
PART II—Continued.			
<i>Cleaning material, etc.</i>			
35	Boxes for cleaning materials.....	\$2. 50	\$87. 50
200	Button sticks.....	.25	50. 00
200	Button brushes.....	.31	62. 00
50	Boxes of cleaning material, russet.....	9. 30	465. 00
150	Cleaning plates.....	.20	30. 00
500	Ingredients for leather blacking.....boxes..	.60	300. 00
7,680	Leather polish.....ounces..	.04	307. 20
7,680	Leather polish, russet.....do..	.04	307. 20
202	Leather polish, russet.....boxes..	.60	121. 20
32,000	Scouring material.....ounces..	.22	7,040. 00
32,000	Whiting.....do..	.005	160. 00
<i>Paints oils, etc.</i>			
10.	Indelible ink.....gallons..	.300	30. 00
100	Indelible ink.....ounces..	.024	2. 40
1,500	Oil, harness.....quarts..	.26	390. 00
118	Stencil paste.....boxes..	.08	9. 44
1,350	Paint, lead colored, quick drying.....pounds..	.11	148. 50
1,000	Paint, black.....do..	.14	140. 00
500	Paint, black, for steel collars.....do..	.34	170. 00
4,000	Paint, black, quick drying.....do..	.22	880. 00
7,000	Paint, olive, quick drying.....do..	.18	1,260. 00
500	Paint, red.....do..	.09	45. 00
150	Paint, first coat, for field and siege guns.....do..	.15	22. 50
150	Paint, second coat, for field and siege guns.....do..	.15	22. 50
500	Paint, vermilion.....do..	.72	360. 00
200	Paint, white.....do..	.09	18. 00
<i>Miscellaneous articles.</i>			
100	Arm racks, revolver, caliber .38.....	29. 16	2,916. 00
250	Arm racks, rifle, caliber .30.....	11. 55	2,887. 50
171	Arm racks, carbine, caliber .30.....	20. 00	3,420. 00
8	Bands for arm racks.....	.96	7. 86
13	Legs for arm racks.....	.15	1. 95
Cartridge storage cases, model 1901:			
5,020	For 5-inch R. F. guns.....	5. 00	25,100. 00
6,920	For 6-inch R. R. guns.....	5. 78	39,997. 60
706	For 12-inch rifles.....	7. 24	5,111. 24
1,345	For 12-inch mortars.....	6. 68	8,984. 60
2	Etching outfits.....	3. 30	6. 60
1	Field-glass case, russet.....	5. 90	5. 90
2,010	Insignia, Medical Department.....	.86	1,728. 60
103	Marking outfits.....	3. 63	373. 89
1	Letters for marking outfits.....set..	.06	.06
12,950	Packing boxes.....	1. 00	12,950. 00
6	Poles, 14 feet long.....	.85	5. 10
5	Boxes for stencil outfits.....	.25	1. 25
164	Stencil outfits.....	1. 32	216. 48
150	Stencil plates, letters, block.....	.14	21. 00
80	Stencil plates, figures, large and small.....sets..	3. 16	252. 80
48	Stencil plates.....	.79	37. 92
Soldering strips for cartridge storage cases:			
1,680	For 5-inch R. F. guns.....	.04	67. 20
2,280	For 6-inch R. F. guns.....	.04	91. 20
1,692	For 8-inch rifles.....	.04	67. 68
3,384	For 10-inch rifles.....	.04	135. 36
5,076	For 12-inch rifles.....	.04	203. 04
1,692	For 12-inch mortars.....	.04	67. 68
6,000	Tin cans.....	.125	750. 00
200	Tin boxes for whiting.....	.07	14. 00
6	Tablets, cast iron.....	7. 80	46. 80
Saddler's tools:			
50	Punching blocks, lead.....	.50	25. 00
50	Sewing palms.....	.72	36. 00
100	Small canvas bags for small stores.....	.60	60. 00
Smith's tools for forge and battery wagons:			
50	Aprons, leather.....	1. 38	69. 00
50	Canvas bags for small stores.....	.60	30. 00
25	Cold chisels, 1-inch.....	.60	15. 00
25	Chisels, cold, handled.....	.50	12. 50
25	Chisels, hot, handled.....	.50	12. 50
25	Clinching irons.....	.40	10. 00
25	Fire rakes.....	.10	2. 50
25	Fire shovels.....	.50	12. 50
25	Fore punches and creasers.....	1. 50	37. 50
25	Hardies.....	.40	10. 00
25	Pritchels.....	.20	5. 00

Abstract of articles fabricated at Rock Island Arsenal, Ill., etc.—Continued.

Quantity.	Articles.	Price.	Amount.
PART II—Continued.			
<i>Miscellaneous articles—Continued.</i>			
Smith's tools for forge and battery wagons—Continued.			
25	Punches, nail	\$0.10	\$2.50
25	Punches, round .....	.19	4.75
25	Toe knives .....	.12	3.00
25	Tongs, 11-inch .....	.80	20.00
25	Tongs, $\frac{1}{2}$ -inch, iron .....	.72	18.00
25	Tongs, $\frac{1}{4}$ -inch, iron .....	.72	18.00
<i>Miscellaneous tools and utensils.</i>			
25	Canvas coal bags, 3-bushel	2.23	55.75
26	Coal-oil cans, 3-gallon	2.85	74.10
29	Cold chisels, $\frac{3}{4}$ -inch .....	.25	7.25
2	Dustpans	1.77	3.54
2	Funnels, tin .....	.47	.94
6	Handles, chisel .....	.21	1.26
20	Handles, hammer .....	.12	2.40
50	Handles, hand ax .....	.14	7.00
4	Hammers, hand, 12 $\frac{1}{2}$ -inch handle .....	.90	3.60
29	Iron nut wrenches, 12 inches long .....	.50	14.50
29	Punches, small, steel .....	.15	4.35
21	Squares, T	1.91	40.11
50	Sperm-oil cans, 2 $\frac{1}{2}$ -inch, pints .....	.45	22.50
4	Washers for jackscrews .....	.44	1.76
Total			1,475,467.46

Statement of amounts expended at Rock Island Arsenal, Ill., under appropriations for the fiscal year ended June 30, 1903.

Appropriations.	Amount.
Ordinance Service, 1903	\$63,677.92
Ordinance Stores—Ammunition, 1903	32,806.19
Ordinance Stores—Manufacture, 1903	390,897.20
Ordinance Stores—Equipments, 1903	788,203.47
Ordinance Stores—Preservation, 1903	21,500.00
Ordinance Stores—Repairs, 1903	37,044.22
Artillery Targets, 1903	814.55
Ammunition for Morning and Evening Gun, 1903	920.00
Replacing ordnance and ordnance stores destroyed by fire at Rock Island, Ill., 1903-4	283,851.55
Manufacture of Arms, 1902-3	131,588.00
Manufacture of Arms, 1903-4	21,601.46
Armament of Fortifications	99,235.69
Board of Ordnance and Fortification	309.00
Total	1,872,449.25

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